

# Oral Health Knowledge and Practices among Children 10-14 Years Attending Cricket Summer Camp

NADEEM TARIQUE<sup>1</sup>, MUSHTAQ AHMAD ALAM<sup>2</sup>, SHAILA TAHIR<sup>3</sup>, UZMA SHAHID<sup>4</sup>

## ABSTRACT

**Objective:** To assess oral hygiene in children in sports and to determine various factors affecting oral health.

**Subjects and methods:** This descriptive cross-sectional study was carried out in 150 children in one month. The study was conducted at Green Cricket Academy Summer Camp Model Town Lahore. The children aged between 10-14 years attending cricket summer camp were included. The children above 14 years of age, craniofacial disorders and history of any systemic disease were excluded from the study. For data collection procedure, formal permission was taken from the concerned stake holder of the cricket ground to collect relevant data regarding the oral dental knowledge and practice.

**Results:** Regarding respondent's oral health status, poor 23, average 66 and 61 were represented as good in their oral health status. The respondent's visits to the dentists with oral dental health, 4 poor, 8 average and 1 good were visiting the dentist regularly and 19 poor, 57 average and 61 good were visiting the dentist occasionally. The regularity of the brushing with oral dental health status, 21 poor, 55 average and 59 good were brushing regularly and 2 poor, 9 average and 3 good were brushing occasionally. The respondents to the habit of taking diet included fruit, meat and vegetables with oral dental health status, 4 poor, 27 average and 35 good were taking fruit, meats and vegetables in their diets while 19 poor, 38 average and 27 good were not taking fruit, meats and vegetables in their diets. The habit of taking sweets with oral dental health status of respondents, 22 poor, 46 average and 40 good were in a habit of taking sweets while 1 poor, 19 average and 22 good were not taking sweets.

**Conclusion:** Education about dental health in playgrounds can lead to improve dental hygiene practice, health and better outcomes.

**Keywords:** Oral health, Attitudes, Behavior, Knowledge, Practice

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## INTRODUCTION

The practice of keeping the mouth, teeth and gums clean and healthy to prevent disease is by regular brushing and flossing and visits to a dentist. The oral health-related quality of life comprises physical, social and psychological aspects<sup>1</sup>. Health problems may affect quality of life but such a consequence is not inevitable<sup>2</sup>. Dental care has been systematically organized to improve dental health attitudes among children and the young<sup>4,5</sup>. This development has improved children's dental health and changed the dental caries patterns affecting them<sup>6</sup>. It also resulted in more adults being able to keep their natural dentition functional into a later age. Unfortunately; this is not the case in the Middle East<sup>7</sup>. Oral health is an important part of general health of body. Oral hygiene determines oral health status. Thus oral hygiene is most important for good health in general. Poor oral hygiene can be source of many diseases. By maintaining the good oral hygiene, patients can

prevent occurrence of many disease. Dental caries and periodontal problems are due to poor oral hygiene practices<sup>8-10</sup>. In middle and low income countries, epidemiological surveys on the oral health of children living in rural areas have found a high level of untreated dental caries. In southern Thailand, 70% of the children were affected by the caries<sup>11</sup>. In Pakistan many studies has been conducted about oral health knowledge and practice in different subjects of the community<sup>12</sup>. The present study is aimed to access the knowledge of children at cricket summer camp. This study might be helpful to assess the level of oral hygiene in children busy in sports; this study will provide data for future research and allows comparisons with children's oral health attitudes in other nations.

## SUBJECTS AND METHODS

This descriptive cross-sectional study was conducted in children aged between 10-14 years attending summer camp at Green Cricket Academy Model Town, Lahore within 10<sup>th</sup> June to 30<sup>th</sup> June, 2011. One hundred and fifty children were included in the study. Children above 14 years of age, craniofacial disorders with a history of any systemic disease were

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<sup>1</sup>Dental Section, Punjab Medical College Faisalabad,

<sup>2</sup>Institute of Public Health Lahore, <sup>3</sup>Fatima Memorial Medical & Dental College, Lahore, <sup>4</sup>Sharif Medical & Dental College, Lahore.

Correspondence to Dr. Nadeem Tarique  
Email: [smylcare@gmail.com](mailto:smylcare@gmail.com)

excluded. For data collection procedure, the concerned stake holder of the cricket ground to collect the relevant data regarding the oral dental knowledge and practice. Verbal consent was taken from respondent, privacy and confidentially was maintained. For analysis, the data were entered in the Epi info.

**RESULTS**

According to the respondent's oral health status 23 (15.3%) were poor in their oral health status, 66 (44.0%) were average and 61 (40.7%) were represented as good in their oral health status (Table 1). The respondent's visits to the dentists with oral dental health, 4 (2.7%) poor, 8 (5.3%) average and 1 (0.6%) good were visiting the dentist regularly and 19 (12.7%) poor, 57 (38.0%) average and 61 (40.7%) good were visiting the dentist occasionally (Table 2). The regularity of the brushing with oral dental health status, 21(14%) poor, 55(36.7%) average and 59(39.3%) good were brushing regularly and 2(1.3%) poor, 9(6%) average and 3(2%) good were brushing occasionally (Table 3). The respondents to the habit of taking diet included fruit, meat and vegetables with oral dental health status, 4(2.7%) poor, 27(18%) average and 35(23.3%) good were taking fruit, meats and vegetables in their diets while 19(12.6%) poor, 38(25.3%) average and 27(18%) good were not taking fruit, meats and vegetables in their diets (Table 4). The habit of taking sweets with oral dental health status of respondents, 22(14.7%) poor, 46 (30.7%) average and 40(26.7%) good were in a habit of taking sweets while 1(0.6%) poor, 19(12.6%) average and 22(14.6%) good were not taking sweets in their routine (Table 5).

Table 1: Frequency distribution of oral health status of respondent (n=150)

Oral Health	No.	%
Poor	23	15.3
Average	66	44.0
Good	61	40.7

Table 2: Frequency distribution of the respondent's dental health status in relation with number of visit to dentist

Dental visit	Oral dental health			
	Poor	Average	Good	Total
Yes	4(2.7%)	8(5.3%)	1(0.6%)	13(8.7%)
No	19(12.7%)	57(38%)	61(40.7%)	137(91.3%)

Table 3: Frequency distribution of the respondent's dental health status in relation with habit of brushing regularly

Brushing regularly	Oral dental health			
	Poor	Average	Good	Total
Yes	21(14%)	55(36.7%)	59(39.3%)	136(90%)
No	2(1.3%)	10(6%)	3(2%)	14(9.3%)

Table 4: Frequency distribution of the respondent's dental health status in relation with habit of diet (fruits, meats and vegetables)

Habit of diet	Oral dental health			
	Poor	Average	Good	Total
Yes	4(2.7%)	27(18%)	35(23.3%)	66(44%)
No	19(12.6%)	38(25.3%)	27(18%)	84(56%)

Table 5: Frequency distribution of the respondent's dental health status in relation with habit of taking sweets

Habit sweets	Oral dental health			
	Poor	Average	Good	Total
Yes	22(14.7%)	46(30.7%)	40(26.7%)	108(72%)
No	1(0.6%)	19(12.6%)	22(14.6%)	42(28%)

**DISCUSSION**

In Pakistan, the oral health knowledge and practice of children playing cricket has been conducted before. The results of this study indicate a relationship in 10-14 year-old subjects, between knowledge about oral health, attitudes to oral health, and oral health practice. In agreement with the report by World Health Organization<sup>13</sup> majority (52.2%) of the students only visited their dentist when they had dental pain. Approximately quarter of the students (24.4%) had regular dental visit every 6 to 12 months. This could be due to school oral health program which required all the students to visit their dentist as part of the annual routine check-up. However, the frequency of dental visit remains relatively low as compared to half of the 1351 second-year secondary school students in Canada used dental services once in every six months<sup>14</sup>. This may be due to the lack of oral health knowledge among these students that caused the frequency of visit low. Low dental visits may probably due to low awareness of importance of oral health thus affects the student's health seeking behavior<sup>13</sup>. In the present study, hygiene was independent of visits to the dentist. When compared the data of respondent's visits to the dentists with oral health status, 4(2.7%) poor, 8(5.3%) average and 1(0.6%) good were visiting the dentist regularly and 19(12.7%) poor, 57(38%) 61(40.7%) average were visiting the dentist occasionally. At any rate, if we do not take into account the education and motivation of the dentist<sup>15</sup>.

In agreement with Joshi et al<sup>16</sup> most students experienced fear during the first dental visit and the main reason that hampered a dental visit was fear of the dental needle. Early oral education in children had a positive influence on dental anxiety, improving the long term dental follow-up. The experiences of first dental visit play an important role in encouraging young children to follow up. Many times, young children are frightened off after one visit due to unpleasant experience. In this study the children regular in the brushing were 136(90.7%) and

14(9.3%) were not regular in brushing. Study data of respondents when compared with the regularity of the brushing to the oral dental health status shows that, 21(14%) poor, 55(36.7%) average and 59(39.3%) good were brushing regularly and 2(1.3%) poor, 9(6%) average and 3(2%) good were brushing occasionally. 114(76%) shows average to good dental health status.

The study showed that 90.7% of the students brushed their teeth regularly, which was more than twice the figure (44.4%) reported by WHO<sup>1</sup>. This shows that sports oriented children are more regular in brushing. The young cricketers who had good knowledge about the importance of oral hygiene were 90.7%, and they cleaned their teeth regularly. Most of the children got knowledge about oral hygiene through their parents while some of them got it from their parents and media both. 74% of children brush once a day and 16% twice a day. Their oral hygiene was more satisfactory than those who brushed their teeth once a week or casual. Our study showed significant relation between knowledge and the oral-dental health status.

In our study 108(72%) children respond yes to the habit of taking sweets and 42(28%) were not in the habit of the taking sweets. When compared the data of respondents to the habit of taking sweets with oral dental health status, 22(14.7%) poor, 46(30.7%) average and 40(26.7%) good were in a habit of taking sweets while 1(0.6%) poor, 19(12.7%) and 22(14.7%) average were not taking sweets in their routine. In terms of frequency of sweet taking, there was no significant difference between the age groups, similar to Al-Sadhan's findings<sup>2</sup>. As the age difference among the groups was small, it is not surprising to note that the respondents shared the same interest in sweet snacks, like most of the teenagers do. Despite of this, there was still a minority (28%) of the respondents that they have never eaten any candy/chocolate/sweet<sup>15,17</sup>. Other than sweet snack, carbonated drinks were reported to be the most favorable among the respondents. The availability of the sweet food, snacks and carbonated drinks within and outside the compound of the ground had facilitated the purchasing of the items among the students. Students seem to be more attracted by the taste and appearance of the food than its nutritional value. In spite of 72% of the children who are in a habit of taking sweets 57.34% are having good oral dental health status is due to regularity in brushing due to inner, parents and teachers motivation<sup>18</sup>.

## CONCLUSION

Oral hygiene awareness education, motivation and regular checkup are the basic steps for improving

oral hygiene practices among children aged 10-14 years. Playground activities also play a vital role in improving discipline and their character building.

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