



ANALYSIS OF ORAL HYGIENE EDUCATION IN OBESE CHILDREN IN LOCAL POPULATION OF PAKISTAN

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Abstract:

Introduction: Obesity and oral health are correlated as both share some common risk factors like dietary, genetic, socioeconomic, and lifestyle issues. **Objectives of the study:** The basic aim of the study is to analyze the oral hygiene education in obese children in local population of Pakistan.

Methodology of the study: This cross sectional study was conducted at October 2018 to January 2019. A total of 100 obese children were selected for this study. All children falling between age limit 10 to 18 years and permanent residents of the area were included. This study was conducted by the ethical approval committee of hospital. Parents of the participants were explained the objectives of the study and assured of the confidentiality. The questions asked were about demographic characteristics like age, sex, class, family income and habits like cigarette smoking and chewing tobacco. **Results:** The data was collected from 100 patients. Females scored more favorably in knowledge and behaviors concerning dental health particularly a significant difference ($P < 0.05$) in brushing habit was observed between the two genders. The Interdentally cleaning habit was observed only in 03% cases. Girls were observed to consume more sweets, snacks and soft drink as compared to boys. Significantly more girls reported brushing their teeth. **Conclusion:** It is concluded that obese children have ore bad habits of eating and due to this reason they suffer more from oral health problems as compared to those who eat properly and clean their teeth's in a proper manner.

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INTRODUCTION:

Obesity and oral health are correlated as both share some common risk factors like dietary, genetic, socioeconomic, and lifestyle issues. Because of its global distribution and severe consequences, which include type II diabetes, osteoporosis, hypertension, and cardiovascular diseases, obesity is a serious health threat. Lifestyle factors, such as lack of physical activity, changes in eating habits, and social changes, have been considered as crucial factors for the global spread of obesity [1]. Furthermore, dental caries and periodontal disease have traditionally been considered one of the greatest public health burdens because of their adverse impact on the growth and development of children. Oral health and obesity share common risk factors, as both are associated with unhealthy dietary habits, sugary soft drinks, snacks, and sugar-rich diets [2]. Overweight and obesity have become public health problems in both developed and developing countries. The rapid increase in bodyweight in both settings indicates that the trend is largely due to social, environmental and behavioural changes, rather than hereditary changes. Globalization, increasing urbanization, changes in traditional family structures and lifestyles, and a more mechanized workplace directly or indirectly affect dietary and physical activity patterns [3]. Excess body weight, along with hypertension, cigarette smoking and hypercholesterolaemia, is an important risk factor for cardiovascular disease (CVD), and is also associated with a higher prevalence of hyperlipidaemia, diabetes mellitus, hypertension and several cancers [4].

Dental health care is the maintenance of teeth in order to keep the teeth clean and prevent 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. Hence the dental health care is essential for general health, quality of life and prevention of oral diseases. The causes of dental diseases are primarily rooted in poor

socioeconomic and physical environment; unhealthy lifestyles and oral health related behavior [5].

Objectives of the study

The basic aim of the study is to analyze the oral hygiene education in obese children in local population of Pakistan.

METHODOLOGY OF THE STUDY:

This cross sectional study was conducted at October 2018 to January 2019. A total of 100 (male 60 and female 40) obese children were selected for this study. All children falling between age limit 10 to 18 years and permanent residents of the area were included. This study was conducted by the ethical approval committee of hospital. Parents of the participants were explained the objectives of the study and assured of the confidentiality. The questions asked were about demographic characteristics like age, sex, class, family income and habits like cigarette smoking and chewing tobacco.

Statistical Analysis

The data was entered through a trained computer operator and imported into statistical package for social sciences (SPSS) version 20.0 for statistical analysis. Frequency distribution tables were produced with percentages.

RESULTS:

The data was collected from 100 patients. Females scored more favorably in knowledge and behaviors concerning dental health particularly a significant difference ($P < 0.05$) in brushing habit was observed between the two genders. The Interdentally cleaning habit was observed only in 03% cases. Girls were observed to consume more sweets, snacks and soft drink as compared to boys. Significantly more girls reported brushing their teeth. The habit of daily brushing was more prevalent in the young age group when compared to students of age 15–18 years but the difference was not significant statistically.

Table 01: Relationship between demographic variables and oral health knowledge

| Socio demographic variables | Frequency (%) | Brushing daily (<i>n</i> = 191) (%) | <i>P</i> value* |
|-----------------------------|---------------|--------------------------------------|-----------------|
| Gender | | | |
| Boy | 176(61.3) | 101(57.4) | 0.001 |
| Girl | 111(38.7) | 90(81.1) | |
| Age | | | |
| 10-14 | 105(36.6) | 71(67.6) | 0.771 |
| 15-18 | 182(63.4) | 120(65.9) | |
| Obesity | | | |
| Less than normal value | 183(63.8) | 116(63.4) | 0.132 |
| Greater than normal value | 104(36.2) | 75(72.1) | |
| Using tooth brush | | | |
| Yes | 251(87.5) | 187(74.5) | <0.001 |
| No | 36(12.5) | 4(11.1) | |

DISCUSSION:

In literature, knowledge and awareness about oral health is reported to be very low and marked differences in oral hygiene habits, depending on age and educational levels were observed. Studies conducted in Spain and Kuwait showed an association between increased knowledge and better oral health [6]. 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. It is important to prevent dental problems before they start [7]. The easiest way is to practice daily brushing and flossing that in turn will reduce the dental diseases. In our study the prevalence of daily brushing is reported as 66.5% [8].

Overweight and obesity, defined as excess body fat compared to lean body mass and growing public-health problem in the world. Decreasing physical activity, increasing sedentary lifestyles and dietary changes are factors strongly associated with the development of overweight and obesity. Studies have observed increases in being overweight in childhood and adolescence since the beginning of 2000, resulting in the increased risk of cardiovascular diseases, respiratory disorders and other chronic diseases during adulthood [9].

A figure which is similar to that reported in a Saudi study conducted in 2003 and found that 65% of students were doing brushing at least once. The same study reported that private school students had a better dental hygiene practice and that age was inversely related to oral health practices [10]. While in our study, we found that both age and type of schooling were not significantly related to the habit of tooth brushing. Our results are consistent with a Chinese study that assessed oral health behavior in schoolchildren and reported that, around 22% of the 12-year-old group brushed at least twice a day, 62% reported brushing frequency to be once a day and it was observed that 16% never brushed or brushed less frequently [11].

CONCLUSION:

It is concluded that obese children have ore bad habits of eating and due to this reason they suffer more from oral health problems as compared to those who eat properly and clean their teeth's in a proper manner.

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