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Research Article

**ANALYSIS OF ORAL HYGIENE EDUCATION IN OBESE
CHILDREN IN LOCAL POPULATION OF PAKISTAN**¹Dr. Wardha Anwar, ²Dr. Amara Altaf, ³Dr. M. Shahzad Munir¹Fatima Jinnah Medical University, Lahore²Services Institute of Medical Sciences, Lahore³Shahida Islam Medical Complex, Lodhran**Abstract:**

Introduction: 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. **Objective 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 study was conducted at Fatima Jinnah medical university and Services Institute of medical sciences, Lahore during December, 2017 to April 2018. 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. **Results:** 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. **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:

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 [1]. Globalization, increasing urbanization, changes in traditional family structures and lifestyles, and a more mechanized workplace directly or indirectly affect dietary and physical activity patterns. 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 [2].

Obesity is a major WHO concern now and WHO has updated recommendations for action to governments, international agencies and concerned partners in the public and private sectors. Dental caries has a wide spectrum of risk factors ranging from child's gender, increasing age, lack of fluoride exposure, oral health behaviours, unhealthy dietary lifestyle such as use of sugar-sweetened beverages [3], low socio-economic status (SES), and maternal oral health. Dental caries is an important public health issue since its lack of treatment leads to pain, repeated prescription of antibiotics, tooth loss, malnutrition, poor childhood development, low self-esteem, and missed school days. Hence, it compromises a child's overall quality of life. Also, it has been acknowledged that decay in primary teeth is a strong risk factor of dental caries in the permanent teeth [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 [5]. The causes of dental diseases are primarily rooted in poor socioeconomic and physical environment; unhealthy lifestyles and oral health related behaviour¹. Some scientists demonstrated that dental health is seen from a health perspective as a balance between destructive factors such as sugar-rich diet, tobacco use and poor oral hygiene versus protective factors including good oral hygiene [6].

A good oral health is the state of mouth free of any disease affecting the oral cavity and its surrounding

structures. Oral health has remained as an integral part of an individual's general health and overall well-being. Maintaining good oral hygiene is one of the most important things for healthy teeth and gums. Good oral health not only enables a person to look and feel good, it is equally important in maintaining oral functions⁷.

Objective 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 study was conducted at Fatima Jinnah medical university and Services Institute of medical sciences, Lahore during December, 2017 to April 2018. 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.

Collection of data

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. A written consent was taken from all of them. The designed questionnaire contained questions that were closed-ended and some were multiple-choice items with alternative statements. The questions asked were about demographic characteristics like age, sex, class, family income and habits like cigarette smoking and chewing tobacco. Obesity history were also asked to the children's.

Statistical Analysis

The data was entered through a trained computer operator and imported into statistical package for social sciences (SPSS) version 17 for statistical analysis. Frequency distribution tables were produced with percentages.

RESULTS:

Knowledge of the participants regarding the oral health is described in table-1. 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. Daily eating habits of children's were also included in the table (table 1).

Table 1: Oral health knowledge of the respondents

Knowledge	Frequency (%)
Daily brushing frequency in obese children	
Yes	45.76
No	19.56
Do not know	33.56
High content of sugar in the diet	
Yes	60.76
No	7.0
Don't Know	32.25
Daily eating habits effect on oral health	
Yes	33.45
No	16.78
Do not know	2.21
Oral problems	
Consult a physician	21.5
Consult a dentist	34.5
Consult a Hakim	5.5
Not care	34.56
Obesity issues	
Yes	78.98
No	21.02

Table 2: 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:

This study aims to provide the oral health knowledge in obese children's because obesity is the common issue in Pakistan. The main factors which contribute towards obesity are our local environment and eating habits. The findings of the present study revealed that knowledge and practice regarding dental health among students of Lahore are not as per standard. The proportion of tooth brushing both twice and once per day in our population was considerably lower than the earlier study i.e. 38% and 83%, respectively [8]. Females and higher class students were strong predictors of brushing frequency same like an early study related to dental health behavior¹⁷. Besides, the interdental cleaning which is important for proper

dental practices was observed only in 12 (3%) cases [9].

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 [10]. 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 education⁸. 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. In our study the prevalence of daily brushing is reported as 66.5%. 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].

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 [12].

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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