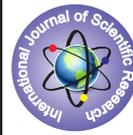


Childhood obesity epidemic in eastern region KSA: How to control it?



Biostatistics

KEYWORDS: Childhood; obesity; epidemic; eastern region; Saudi Arabia

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ABSTRACT

Objective: Our study aimed to determine the prevalence of obese and overweight children in eastern region in Saudi Arabia, and to study parent's awareness of obesity and emotional eating. Eventually measuring the quality and quantity of snack food consumed by children in homes and schools.

Study design: A cross sectional study.

Methods: A study of 424 respondents was conducted over 4 months duration, period from July 2016 to December 2016. A questionnaire to parents included 21 questions was distributed assessing child eating habits and to study the prevalence and social awareness of obese and overweight children in eastern region in Saudi Arabia and how to control this epidemic.

Results: There were a total of 424 questionnaires that were analyzed. 10.8% (n=46) of the respondents were underweight, 57.8% (n=245) were normal weight, 1.7%(n=7) were overweight, 22.9% (n=97) were obese and 6.8% (n=29) were morbidly obese.

Conclusion: The study shows a promising future for good child health and obesity awareness, though as society we need more interventional programs and awareness campaigns in malls, gardens and school halls about obesity and healthy life style. Our schools need cyclic governmental supervision of food provided in the cafeteria and national program to encourage healthy and fit child.

Introduction:

Childhood obesity is a major public health crisis that affect child health the rest of their lives. The prevalence of childhood obesity has increased over few years. It is caused by one or more factors including: genetic, behavioral, environmental, physical, psychological, and social health problems.

Body mass index (BMI) is a measure used to determine childhood overweight and obesity. Overweight is defined as a BMI at or above the 85th percentile and below the 95th percentile for children and teens of the same age and sex. Obesity is defined as a BMI at or above the 95th percentile for children and teens of the same age and sex.

BMI is calculated by dividing a person's weight in kilograms by the square of height in meters. For children and teens, BMI is age- and sex-specific and is often referred to as BMI-for-age. A child's weight status is determined using an age- and sex-specific percentile for BMI rather than the BMI categories used for adults. This is because children's body composition varies as they age and varies between boys and girls. Therefore, BMI levels among children and teens need to be expressed relative to other children of the same age and sex.⁽¹⁾

In a world where fast food is just around the corner, and increasing rate of obesity among children in Saudi Arabia, are we able to know what do our child eat everyday? And can we make them choose the right food to eat when we are not around? Do our child know when to eat or are we raising a generation of emotional eaters? Are our children aware of the hazards of obesity and how to prevent it? And as known; Without a strong contribution from schools, we are not likely to improve this epidemic, So how schools can affect the physical activity and healthy eating in child?

To answer these questions and know the right preventive and

management plans to control this epidemic, we conducted this cross-sectional study as a questionnaire to parents in the eastern region.

Objectives of the study:

In this study our aim is to assess the prevalence of obese and overweight children in eastern region in Saudi Arabia, and to study parent's awareness of obesity, emotional eating and how to control it. Eventually measuring the quality and quantity of snack food consumed by children in homes and schools

Method:

A cross-sectional study of 424 respondents was conducted over 4 months duration, period from July 2016 to December 2016.

A questionnaire to parents included 21 questions was distributed to study the Prevalence and social awareness of obese and overweight children in eastern region in Saudi Arabia and how to control this epidemic.

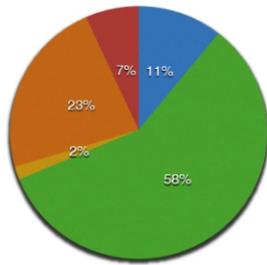
The data were collected anonymously and then the results were analyzed statistically using SPSS Version 22. Chi-Square test was used.

Result:

There were a total of 424 questionnaires that were analyzed. 10.8% (n=46) of the respondents were underweight, 57.8% (n=245) were normal weight, 1.7%(n=7) were overweight, 22.9% (n=97) were obese and 6.8% (n=29) were morbidly obese.

Questions pertaining prevalence of obese and overweight children in eastern region in Saudi Arabia were asked and responses included "yes or no"

■ underweight ■ normal weight ■ overweight ■ obese ■ morbidly obese



We found that, female child have a greatest risk of increase BMI shown as;

Both females and males in age between 13-15 years have highest risk than other age group in increase weight.

There is a significant at 0.05 p value if the child obese and morbidly.

Discussion:

This is a cross sectional study as a questionnaire to parents in the eastern region to study the Prevalence and social awareness of obese and overweight children in eastern region in Saudi Arabia and how to control this epidemic.

Study between 424 children shows obese 23%, morbidly obese 7%, with mean BMI = 26.9, with no significant difference between females and males (female 49.1% vs males 50.1%) in comparison to study done in 2001 in eastern Saudi Arabia⁽²⁾ which shows significant difference (19.3% female vs 11.8% males).

Also there is recent study done in 2016 in Saudi Arabia⁽³⁾ shows that the childhood obesity and overweight were higher in females than in male, and dietary habits, socioeconomic status with physical inactivity are found to be significant contributing factors.

Other study in 2008 in alhassa⁽⁴⁾ which done on the age ranged from 10 to 14 years shows that the prevalence of overweight is 14.2% while obesity is 9.7%, and the mothers of overweight and obese children are less educated.

For family awareness of snacks consumption 37.5% of families don't follow or control the food consumption between meals, while 62.5% of families are fully aware of that with 57.3% of mothers participating in the study make sure to provide their kids with healthy home made meals, also 89.4% of parents don't encourage emotional eating.

Which shows that the families in eastern region today are more educated about child health and good eating habits.

About food served at schools 36.6% are healthy food while 63.4% are unhealthy (chocolate, potato chips, high sugar content beverages), which means our schools still need an effective nutritional education programs to provide a healthy environment.

Conclusion:

Overall the study shows a promising future for good child health and obesity awareness, though as society we need more interventional programs and awareness campaigns in malls, gardens and school halls about obesity, healthy diet, physical activity, parents lifestyle. Our schools need cyclic governmental supervision of food provided in the cafeteria and national program to encourage healthy and fit child.

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