WHO EUROPEAN CHILDHOOD OBESITY SURVEILLANCE INITIATIVE- COSI-BIHOR COUNTY 2016

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Abstract

Childhood obesity is a major public health problem, whose prevalence is increasing in all the world.and alarming tendency in Europe The purpose of this surveillance system is setting trends in terms of children obesity from primary school. For this in Europe started from 2007 a system of surveillance of obesity in childhood COSI monitoring weight excessive in children.This had 3 stages and Romania started in the third stage .In Bihor County in 2016 may-june, we measured weight and height for 160 pupils from 5 schools, 74 from I primary class and 86 from II primary class;2 schools was from the urban environment and 3 schools from the rural environment..Their age was between 6,9 and 8,9 years.We found 43% with normal weight,46% overweight and 9,3 % with obesity. Childhood obesity lead to the decrease of self-esteem, diseases associated with obesity,60 % of these children will be adults overweight with all the problems results from overweight.

Key words: children, overweight, obesity, school, public health.

INTRODUCTION

Childhood obesity is a major public health problem, whose prevalence is increasing in all the world.and alarming tendency in Europe Child obesity will cause serious health problems such as future adult, like increased cholesterol, hyperinsulinemia, hypertension, atherosclerosis and increased mortality at early adulthood.

Child obesity it is strongly associated with risk factors such as cardiovascular disease, type II diabetes, orthopedic problems and mental disorders. Often, the obesity in childhood is linked to poor school results and a decrease in self-esteem. Over 60%of children with overweight before puberty will be with overweight in the first period of maturity this reducing the average age at which they become visible hidden diseases.

Prevention is the single valid option for stopping this epidemic because current practices of treatment are only for maintain the problem under control and not healing.

Obesity in childhood is a public health problem for all countries and for this at WHO European Ministerial Conference on counteracting obesity (Istanbul, 15-17 november 2006), it was recognized the need for standardization and a European surveillance system within the WHO European Region.

Its purpose is to establish surveillance trends in overweight and obesity regarding children in primary school for a correct understanding of the epidemic in this population group and allowing comparisons between countries of the European Region.

An assessment made by the Regional Office in 2005 indicated that only 13 (25%) of the 53 European Member States of WHO have data about the prevalence of overweight or obesity copiilo aged 6-10 years.

For this in Europe started from 2007 a system of surveillance of obesity in childhood COSI which is a continuous systematic process of collecting, analyzing, interpreting and disseminating information to monitor excessive weight decrypt.The system wants to measure overweight and obesity trends in children aged 6 to 9. 9 years for comparison between countries of the European Region. This system had 3 stages and Romania started in the third stage.

All original forms were prepared in English and translated into the local language and retranslated into English by completing.

WHO has been involved in coordinating all activities.

MATERIAL AND METHOD

In Bihor County in 2016 may-june, we measured weight and height for 160 pupils from 5 schools, 74 pupils (43 in urban and 31 in rural) from first primary class, five classes and 86 pupils (42 from urban and 44 from rural) from second primary class, five classes. Their age was between 6, 9 and 8, 9 years.

Two schools was from the urban environment (High School „I.Ghibu" from Oradea and High School „O.Goga" from Marghita) and three schools was from the rural environment (Secondary School from Olcea, Tileagd and Ciumeghiu).

Four forms were prepared for collecting data: the registration form of the examiner, mandatory form for school, family and volunteer form letter informing the parent.

1. In the registration form of the examiner we had**:**

- Id of the child with country code,year,school code,degree,class,child code, child's name, sex, age, date of birth, place of residence, and if it had breakfast;

- **Anthropometric examination** comprising: time measurement, measurement time (hour and minute) before lunch or after lunch, the child's consent to be measured, weight in kilograms and height in cm, description

that is dressed child clothes, examiner code and his signature, observations of the examiner.Measuring height and weight was done accurately.

2. In mandatory form for school we had:

-country,year and school code

- school identification data

-information about participating classes: class level, number of children registered girls / boys, the number of children examined, the number of children absent, the number of children who did not wish to be examined and the number of children whose parents have not consented.

- information about the school environment: playground, gymnasium, physical education classes, school bus, nutrition education classes, school canteen, food and beverages can be purchased from school.

This mandatary form for school was completed and signed by the director of each school included in the study.

3. Family volunteer form includes data on diet and behavior of active / inactive children. These forms were completed by parents and carers with their children.

4. The parent information letter is sent every parent to know what measurements will be her child. The parent may refuse at the end of this letter is to measure the child.

The examiners was from Bihor DSP-Children Hygiene department. We was instructing in Bucharest to National Hygiene Institute and the scales, height measuring device,questionnaires were distributed to all counties involved in the program COSI and was same for all.

These was necessay to had same appliances all counties to have the most accurate results across the country.

The examinations were conducted over four weeks maximum for the five schools in the Bihor county. All examinations were performed in the morning before lunch during maximum of four hours.

RESULTS AND DISCUSSION

Weight measurement results in children from first and second primary classes in Bihor County are shown in Table1:

Table 1

Children Weight

KILOGRAMS	FIRST CLASS-CHILDREN NR.	SECOND CLASS-CHILDREN NR.
<20 kg	3 (4,05%)	1 (1,16%)
20-30 kg	38 (51,35%)	38 (44,19%)
30-40 kg	22 (29,73%)	29 (33,72%)
40-50 kg	8 (10,81%)	14 (16,28%)
50-60 kg	3(4,05%)	4(4,65%)
TOTAL	74	86

It is observed that the highest percentage of children in both classes is in the weight range between 20-30 kg (51,35% /44,19%) but we found children in the weight range between 50-60 kg (4,05%/4,65%).

Height measurement results in children from first and second primary classes in Bihor County are shown in Table 2:

Table 2

Children Height

CM.	FIRST CLASS-CHILDREN NR.	SECOND CLASS-CHILDREN NR.
110-120 cm	4 (5,40%)	3 (3,49%)
120-130 cm	40 (54,05%)	23 (26,74%)
130-140 cm	2 9(39,19%)	43 (50%)
140-150 cm	1 (1,35%)	17 (19,77%)
TOTAL	74	86

It is observed that the highest percentage of children in first primary classes in the height range between 120-130 cm (54,05%) and in second primary classes between 130-140 cm (50%); but we had childre between 140-150 cm in first primary classes 1,35% and in second primary classes 19,77%.

CONCLUSIONS

1. Increasing the number of overweight children and obesity although it was raised and rank high.
2. Use unhealthy food since childhood
3. Excessive use of the computer, TV, phone and less physical activity and outdoor
4. For this we need a a comprehensive public health for children

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