WEIGHT EXCESS IN ADULTHOOD, A VERY IMPORTANT RISK FACTOR

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Keywords: *adolescence, overweight, cardio-vascular risk factor*

Abstract: *Introduction: The adolescents' health represents a very important public issue, considering the idea that the adolescence represents a bridge between the childhood and adulthood. This age is especially exposed to an unhealthy lifestyle. Purpose: Infants' obesity is more than an image issue; it represents a public health issue. The present study aims at proving the increase of the prevalence of the overweight adolescents and the implications over their health status. Materials and method: The quantification of the overweight degree was registered with the standard clinical balance, over 362 adolescents between 17 and 19 years old, using physiometric measurements and calculating the body mass index. We determined the lipids and glucose parameters and measured the arterial blood pressure. All the subjects were asked a number of questions regarding their lifestyle. Conclusions: The partial results of our study are registered within the general tendency worldwide. It is certain that this study realises an improvement in the quality of life, making the tested adolescents conscious about the cardio-vascular risk factors. The individual benefits were obvious.*

Cuvinte cheie: *adolescență, obezitate, factor de risc cardiovascular*

Rezumat: *Premise: Sănătatea adolescenților reprezintă o problemă importantă de sănătate publică, plecând de la premisa că adolescența reprezintă puntea de legătură dintre copilărie şi perioada de adult. Această vârstă este expusă în mod deosebit unui stil de viața nesanogen. Scopul lucrării: Obezitatea infantilă este mai mult decât o problemă de imagine, este o problemă de sănătate publică. Prezentul studiu doreşte să demonstreze creşterea prevalenței adolescenților cu surplus de greutate şi implicațiile acesteia asupra stării de sănătate. Material şi metodă: Cuantificarea gradului de obezitate a fost înregistrat în cadrul bilanțului standard, la un număr de 362 de adolescenți, cu vârsta cuprinsă între 17 şi 19 ani, prin măsurători fiziometrice şi calcularea indicelui de masă corporală. S-au determinat parametrii metabolismului lipidic şi glucidic şi s-a măsurat tensiunea arterială. Participanții la studiu au răspuns la întrebări privind stilul de viață. Concluzii: Rezultatele preliminare ale prezentului studiu se încadrează în general în tendința înregistrată în țările dezvoltate. Cu siguranță acest studiu a atras îmbunătățirea calității vieții si conştientizarea factorilor de risc cardiovascular la adolescenții participanți. Beneficiile pe plan individual au fost evidente.*

INTRODUCTION

The adolescents' health represents a very important public issue, considering the idea that the adolescence represents a bridge between the childhood and adulthood. This age is especially exposed to an unhealthy lifestyle.

PURPOSE OF THE STUDY

Infants' obesity is more than an image issue; it represents a public health issue. The present study aims at proving the increase of the prevalence of the overweight adolescents and the implications over their health status.

MATERIALS AND METHOD

The quantification of the overweight degree was registered with the standard clinical balance, over 362 adolescents between 17 and 19 years old, using physiometric measurements and calculating the body mass index. We determined the lipids and glucose parameters and measured the arterial blood pressure. All the subjects were asked a number of questions regarding their lifestyle.

RESULTS

Upon the standard clinical examination of the XIIth form pupils from the county of Sibiu, we observed that the number of the disharmonic persons with an overweight problem tripled in the school year 2007/2008 comparing to 2006/2007, for the group of age of 17-19 years old. A number of 4156 adolescents have been examined, for the school year 2006/2007; 42 of the subjects were considered overweight and obese. In the school year 2007/2008, from 3967 adolescents examined, 151 were found overweight and obese.

We determined the weight, height and the body mass index in order to estimate the staturo-ponderal development of the examined adolescents.

From a total of 362 examined adolescents, 54 of the subjects showed a weight excess, with a BMI > 25 Kg/m^2. 42 of the subjects, 11.6 %, were overweight, with a BMI between 25-29.9 Kg/m^2. A number of 12 persons, 3.30 %, were considered obese, with a BMI > 30 Kg/m^2.

The prevalence of the overweight and obesity within the studied group was similar to the prevalence of the overweight adolescents in USA and Europe.

This weight excess is due to unhealthy food behaviour and a poor lifestyle.

From the data provided by our questioned subjects, we concluded that the adolescents are inclined towards an alimentation rich in unsaturated fats, preferably fast-food alimentation (junk food).

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ACTA MEDICA TRANSILVANICA March 2010; 2(1):149-150

Almost half of the overweight subjects, 81 %, eat daily saturated fats especially pork and pork products.
33.3 % from the overweight adolescents, and 100% from the obese adolescents eat daily fast foods, while 35.70 % of the overweight adolescence consume fast foods, 2-3 times a week.

Another characteristic of the overweight persons is the sedentary lifestyle.

From our overweight group, 40.5 % do not practise any physical sport. More than half of the subjects, 69% prefer a sedentary lifestyle during their free time, choosing television and/or playing on the computer, as a way of relaxation.

Weight excess determines the development of other conditions, such as insulin resistance and diabetes mellitus, dyslipidemias and high blood pressure.

The degree of obesity correlates to a high blood sugar level in accordance with Pearson correlation index. High blood sugar levels over 100 mg/dl were seen in 29.42 % of the overweight subjects; 3.93 % of them had the blood sugar level over 110 mg/dl.

Almost half of the overweight and obese persons had abnormal results of the blood lipids. High cholesterol levels, 160-200 mg/dl, were found in 49.02 % of the overweight and obese subjects, while 23.54 % of them had the cholesterol above 200 mg/dl. Also 49.03 % of the subjects had an abnormal LDL-cholesterol level, while 35.30 % had LDL-cholesterol values more than 129 mg/dl. Almost one third of the overweight subjects, 29.42 % had the triglycerides more than 125 mg/dl. A HDL-cholesterol level of 45-55 mg/dl was found in about 45.10 % of the examined adolescents; 41.18 % of them had the level of HDL-cholesterol lower than 45 mg/dl.

The alteration of the lipids profile is evident for the overweight subjects compared to the general group, in accordance with Pearson correlation index.

All the obese persons taken into our study measured an abnormal blood pressure, higher than 120/80 mmHg. The results of this study show a very strong correlation between the increase of body mass index and the increase of blood pressure level.

CONCLUSIONS

The partial results of our study register within the general tendency worldwide. It is certain that this study realises an improvement in the quality of life, making the tested adolescents conscious about the cardio-vascular risk factors. The individual benefits were obvious.

The perpetuation and accumulation of the cardio-vascular risk factors over time determines an early increase of the morbidity and mortality through cardio-vascular conditions. The active and continuous detection of the cardio-vascular risk factors and their treatment based on national prophylactic programmes will realise an improvement of the general public health.

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