EDITORIAL ARTICLE

OBESITY

A GLOBAL EPIDEMIC THAT THREATENS ADULTS, ADOLESCENTS AND CHILDREN

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Over the last years, obesity has become a major public health-hazard with epidemic proportions that affects adults, adolescents and children of both genders. Rates of obesity have been dramatically increased in adult population in many countries since the 1960s, most noticeably in the United States, Eastern Europe and Mediterranean countries. A similar trend became evident in children and adolescents at about 1980 and increased dramatically by the late 1990s. The frequency of its occurence has been raised tremendously in the United States of America but also in Europe, with girls wielding the sceptres to this negative evolution. Consequently, nowadays obesity in early age and in adolescence constitutes a worldwide threat. 1-5

The variability in the prevalence of obesity is wide in different countries. According to the literature, many factors promote overweight or obesity, such as the level of education, socio-economic status, geographic differences, age, sedentary life, sex, unhealthy dietary patterns, etc.¹⁻⁵

The risk factors for childhood and adolescent obesity are more complicated. According to the literature, genetic factors, environmental changes, increased energy intake, dietary habits, sedentary lifestyle are claimed to play the most important role to the manifestation of this complex condition. 6,7,8

Obesity is multidimensional phenomenon associated with increased risks of cardiovascular diseases, type 2 diabetes, rheumatoid arthritis, and some type of cancers. Furthermore, obesity significantly affects the quality of life and reduces the average life expectancy.⁴⁻⁶ Obesity is a condition characterised by excessive accumulation of fat, mainly under the skin (subcutaneous), but also on various organs of the body (visceral). The most common cause of obesity is the imbalance between daily energy intake and energy expenditure. When energy intake is higher compared to energy expenditure, the excess energy is stored in the adipose tissue. Important research studies support, that controlled calorie consumption and physical exercise reduce the risk of obesity and metabolic disorders. Moreover, obesity can be the result of malfunction of certain endocrine glands.^{9, 10}

The most common anthropometrical measurement that is used for assessment of obesity is Body Mass Index (BMI) and is calculated by the following equation: BMI = Weight/Height. According to the World Heath Organization, a value of $BMI \ge 30$ kg/m² equals obesity.¹⁰

Waist to Hip Ratio is another test used to measure obesity associated to abdominal adiposity which is strongly associated with cardiovascular disease risk factors such as hyperglycaemia, high blood pressure, and dyslipidemia. The clustering of these risk factors, plus central obesity consist the metabolic syndrome, which is related to elevated risk of cardiovascular morbidity and mortality. Values greater than 0.95 for men and 0.80 for women should be treated seriously as they normally indicate body fatness. ^{11,12,13}

The solution to defeat this global epidemic should be a public health matter of great priority. It is very important to develop a strategy of culturally appropriate intervention capable to change attitudes and behaviour.Healthy dietary habits and physical exercise in conjunction with social and educational policies, can provide a basis, that foster health and well-being throughout human life. ^{11,12,13}

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