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Obesity- lifestyle choice or a disease? Changes in perception of obesity

- **Anna Pawlikowska-Gorzelańczyk** Cardiosexology Students Club, Wrocław Medical University, 50-368 Wrocław <https://orcid.org/0000-0001-7725-2220>
- **Ewa Szuster** Cardiosexology Students Club, Wrocław Medical University, 50-368 Wrocław <https://orcid.org/0000-0003-1154-1606>
- **Paulina Kostrzewska** Cardiosexology Students Club, Wrocław Medical University, 50-368 Wrocław <https://orcid.org/0000-0002-7804-4535>
- **Amanda Mandera-Grygierzec** Cardiosexology Students Club, Wrocław Medical University, 50-368 Wrocław <https://orcid.org/0000-0001-7658-5429>

Abstract

Introduction and purpose

Nowadays obesity has become a main problem in the world's population and it is beginning to replace undernutrition and infectious diseases. Over the years perception of obesity has diametrically changed. Obesity is no longer the result of bad choices but serious medical problem. The aim of this study is to show how changes in perception of obesity affect the obesity pandemic.

Review methods

The literature review included articles available on the websites of health-related organizations and databasis on PubMed. As a part of analysis systematic search of current scientific data was performed.

Description of the state of knowledge

Obesity is defined as an abnormal or excessive fat accumulation and in adults BMI ≥ 30 is necessary to recognize it. Obesity has plenty of consequences such as diabetes, hypertension, cancers etc. In June 2013 the American Medical Association made a decision to recognize obesity as a disease. That changed the perception of obesity by the public and caused many actions in prevention and treatment. Management of obese patient consists of diagnosis the

obesity-causing diseases, recognition of eating and physical activity habits. Surgical as well as pharmacological treatment is available and should be individually considered.

Summary

Recognition of obesity as a disease requires health organisations to build special prevention and treatment programs. Nowadays there is an array of treatment methods for obesity. However the most important method to stop the pandemic is education and promotion of a healthy lifestyle, according to the motto, prevention is better than cure.

Keywords: obesity, obesity management

Introduction and objective

Nowadays obesity has become a main problem in the world's population and it is beginning to replace undernutrition and infectious diseases [1]. Over the years perception of obesity has diametrically changed. Obesity is no longer the result of bad choices but a serious medical problem. What does it change when obesity becomes a disease? The aim of this study is to present how changes in perception affect obesity pandemic.

Review methods

The literature review included articles available on the websites of health-related organizations and databases on PubMed. As a part of analysis systematic search of current scientific data was performed.

Abbreviated description of the state of knowledge

Obesity- definition

Obesity is defined as an abnormal or excessive fat accumulation. Body Mass Index (BMI) is widely used to classify obesity in adults. It is defined as a person's weight in kilograms divided by the square of his height in meters (kg/m^2).

For adults:

- overweight: $\text{BMI} \geq 25$,
- obesity $\text{BMI} \geq 30$

For children aged between 5–19 years:

- overweight $\text{BMI} \geq 1$ standard deviation above the WHO Growth Reference median; and
- obesity $\text{BMI} \geq 2$ standard deviations above the WHO Growth Reference median.

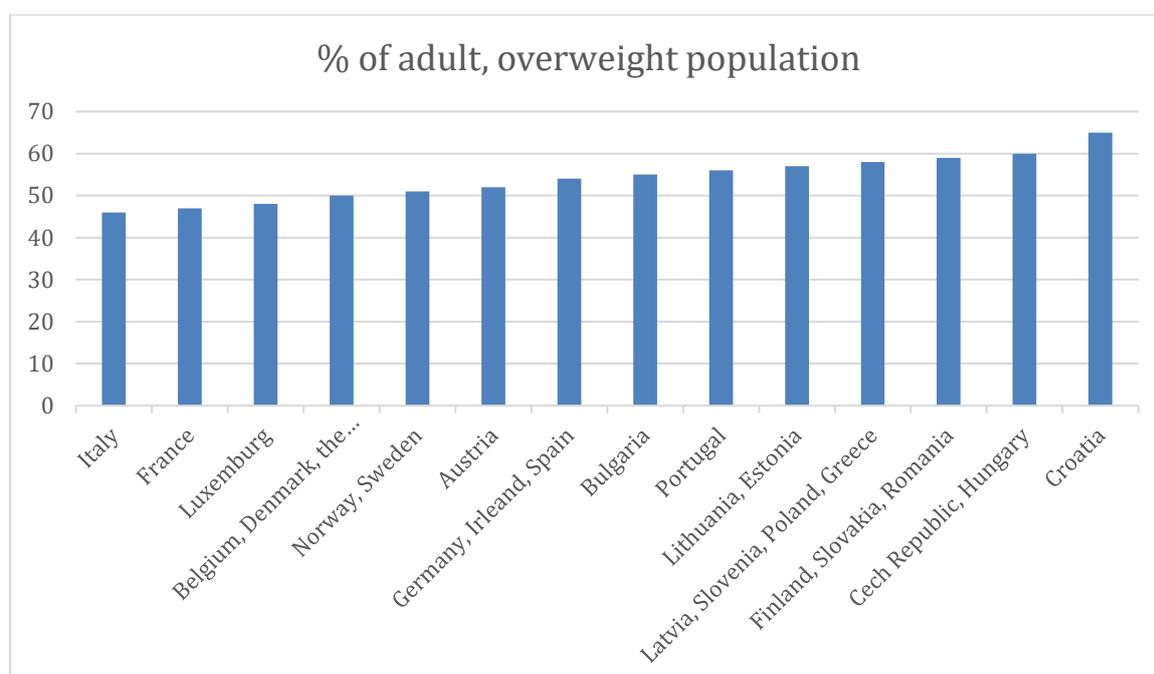
For children under 5 years of age:

- overweight is $\text{BMI} \geq 2$ standard deviations above the WHO Child Growth Standards median
- obesity $\text{BMI} \geq 3$ standard deviation above the WHO Child Growth Standards median.

Obesity in numbers

In 2016 more than 1.9 billion adults were overweight and 650 million of these were obese. Over 340 million children and adolescents aged 5-19 were overweight or obese in 2016. 39 million children under the age 5 were overweight or obese in 2020 [2]. Obesity became a pandemic.

Country	Percent of overweight population
Italy	46
France	47
Luxemburg	48
Belgium, Denmark, the Netherlands	50
Norway, Sweden	51
Austria	52
Germany, Ireland, Spain	54
Bulgaria	55
Portugal	56
Lithuania, Estonia	57
Latvia, Slovenia, Poland , Greece	58
Finland, Slovakia, Romania	59
Cech Republic, Hungary	60
Croatia	65



Source: Eurostat- Overweight and obesity - BMI statistics

Consequences of obesity

Every year about 30000 Americans die due to the consequences of obesity. Obesity causes many chronic diseases such as diabetes type II, hypertension, dislipidemia, cardiovascular disease, osteoarthritis, a number of cancers, sleep apnea and gallstones. Also metabolic syndrome is strongly connected with obesity [3].

Obesity increased risk of breast, prostate, ovarian, gastric, renal and colon cancers [4], and also rectum, uterus, esophagus, pancreas, and gallbladder cancers [3]. It is documented that weight loss decreased the risk of breast cancer[5]. It is also proved that weight reducing diets, usually low in fat, with or without exercise advice or programmes, may reduce premature all cause mortality in adults with obesity.[6] Blood pressure can also be lowered or normalized by weight lose [3]. Among obese people compared to people normal weight, limitations in daily life appear five years earlier on average impeding the conduct of normal life activity [7].

Obesity as a disease

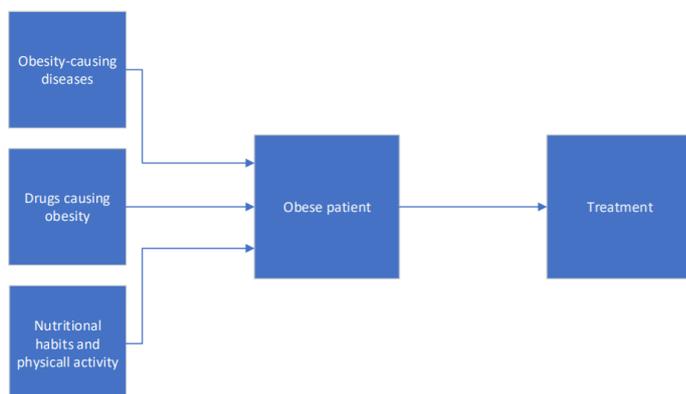
In June 2013 the American Medical Association made a decision to recognize obesity as a disease. At the European Congress on Obesity in Porto, Portugal and the European Congress of Endocrinology in Lisbon, Portugal, several experts called for more countries to officially recognise obesity as a disease. This definition is important to pay attention to the need to build the system of prevention, diagnosis and treatment. It has changed the public understanding of obesity as not only a problem caused by personal lifestyle choice [8]. Obesity as a disease should be taken into account by governments and public health systems. Reducing abundance of agents that cause obesity should be taken to control the epidemic. That requires collaboration between obesity professionals, local health services, environmental authorities, governments and the food industry. Governments have a variety of means to change the food industry e.g taxes, controlling availability and affordability and also improving sport infrastructure. Special programs which promote physical activity and healthy lifestyle play the main role in obesity prevention [9]. Until obesity is universally recognised as a chronic disease, not a lifestyle choice, its prevalence is unlikely to be reduced.

Managment of obese patient

Due to multivariate etiopathogenesis of obesity, the initial assessment of the patient is the main factor of the successful therapy, The basic task for the doctor is to find all diseases which can be the reason of weight gain such as endocrine pathologies: Cushing's syndrome, acromegaly, hypothyroidism, growth hormone deficiency; rare genetic syndromes: Prader- Willi, Bardet-Biedl syndrome, leptin deficiency. Also applied treatment can cause obesity e.g antileptics, neuroleptics, antidepressants, glucocorticosteroids, insulin, and oral hypoglycemic drugs. Questions about life situations also play an important role (stress situations such as death of family members, divorce, wedding, job problems). Necessary is also to recognize eating and physical activity habits.

The main elements in reducing weight are education in the field of healthy eating, physical activity and psychotherapy. Restrictive, commercial diets often have harmful impacts on health. Long term well balanced diets are more effective and without yo-yo effect [10]. Physical activity is not only a part of reducing weight but also is important in prevention of hypertension

[11]. Recommended activity for adults is 150-200 min moderate- intensity or 75-150 high-intensity [12]. Psychotherapy is a key to behavior modification and the learning of self-control [13].



Pharmacological and surgical treatment

Since obesity is seen as a disease many methods of treatment are used. Pharmacotherapy can be used only with lifestyle changes. There are only 3 registered medications in Poland: orlistat, liraglutide and a drug composed of naltrexone hydrochloride and bupropion hydrochloride. The indication for the treatment is BMI ≥ 25 coexisting with ≥ 1 obesity complication in a patient who, using non-pharmacological treatment, has not achieved the therapeutic goal and has no contraindications. The choice of the drug from among the available preparations should be individual [13]. In recent years more and more often surgical treatment is performed. To indications belong: BMI ≥ 40 or BMI ≥ 35 in patients in whom surgically induced weight loss may have a potential improvement in obesity-related diseases. Surgical treatment can be also considered in patients with BMI 30-34,9 and diabetes type II if hyperglycemia persists despite the use of oral medications and insulin. Bariatric procedures are recommended for patients between 18 and 65 years of age. The most common methods which are used are sleeve gastrectomy, Roux-en-Y gastric bypass, mini gastric bypass, adjustable gastric banding, biliopancreatic diversion [14].

Summary

In recent years, the perception of obesity has diametrically changed, from cosmetic defects to chronic disease. Obesity as a disease urges governments and health organisations to take action against this pandemic and pays attention to importance of prevention and treatment programs. Also doctors play a main role in education and treatment. Nowadays there is an array of treatment methods for obesity. However the most important method to stop the pandemic is education and promotion of a healthy lifestyle, according to the motto, prevention is better than cure.

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