## An Overview Regarding Obesity Rate in European Union Countries \*Petrariu Ileana\*\*

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**Abstract**: **The purpose of the research** is to highlight the evolution of overweight and obesity epidemic on EU countries, it's social and economical impact, risk factors and complications. Data demonstrates that obesity epidemic level are rising. The prognostics require society and public healthcare professionals' immediate resolutions.

**Introduction.** Obesity it is known both a disease and a condition that increases the developing process of a wide range of other diseases [1]. This condition is fueled by economic growth, industrialization, mechanized transport, urbanization, increasingly sedentary lifestyle and bad diets [2].

In the beginning of 2021, European Parlament called for a better management and treatment of obesity as its level in European Union (EU) have almost tripled since 1975. According to Our World in Data, 22.82% of EU population was obese in 2016, data compared to just 9.3% in 1975, resulting an increase of 161% in just 40 years [31].

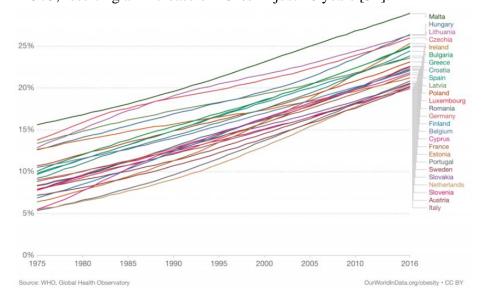


Fig. no. 1 Adult obesity rate in 2016. Progress line of obesity in EU, from 1975 to 2016 [31].

It is estimated that by 2030, 38% of the world's adult population will be overweight and another 20% will be obese [2][4]. It is known that when an adult has a BMI of 30 or greater it is considered obese [3]. In many developed countries overall obesity growth trends seem to have leveled off [5] while in other countries morbid obesity continues to climb, including among very young age [2].

It was demonstrated that obesity have many common helth consequences like: type 2 diabets [7], cardiovascular disease [8], cancer (gallbladder cancer [9], liver cancer [10], ovarian cancer [11], prostate cancer [12], leukemia [13]), infections [14], vaccine non-responsiveness [15], dementia [16] etc.

The most serious complication of obesity is death. According to WHO being overweight or obese is recognized as being the fifth leading cause of death. Therefor in EU in 2017, 125.14 obesity related deaths per 100,000 inhabitants were from Bulgaria, Romania follows closely with 109.7 deaths per 100,000 inhabitants [31].

Various studys revealed that there a many risks factor that led to overweight and obesity: reduced physical activity [26], food environment [27], poverty [28], sleep duration [29], sugar, fat, protein and carbohydrates hight consumption, smoking, psychological stress, poor education, alcohol and drugs consumption, various diseases [30].

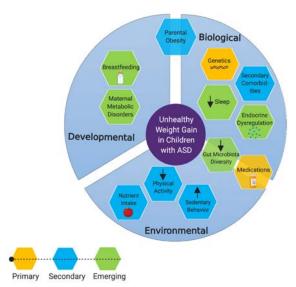


Fig no.2 Risk factors in childrens obesity [6]

According to the health economic model, obesity cost between 2.1% and 4.7% of total health care [17][18] and 2.8% of total hospital costs [19].

In european countrys, various studys [23-25] found out that overweight and obesity were associated with considerable healthcare costs [22]. The highest national obesity related cost is 10.4 bilion euros, in Germany [20] and the lowest national costs were found in Netherlands 0.17 bilion euros [21].

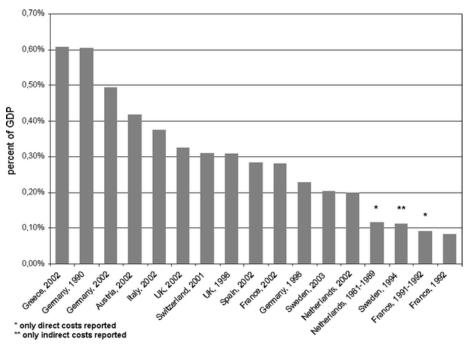


Fig. no.3 Health – economic burden of obesity in Europe [22]

A recent study of World Population Review showed data regarding each EU country obesity rate that vary significantly by country as a result of lifestyle and diets (Fig. no. 4). The article showed no direct correlation between the economical status and obesity rate, but it is observed that wealthier countries tend to have resourses for campagne, programs and various actions in order to educate people regarding diet, physical activity and adopting a healthier lifestyle [32]. In 2021 the EU country with the highest obesity rate was Malta, almost 30% of the total adult population vas obese. The lowest rate was found in Denmark (19.7%). Romania is situated on the 13<sup>th</sup> place with a rate of 22.5% obese population, after Luxemburg (22.6%) and before Germany (22.3%) (fig. no. 5).

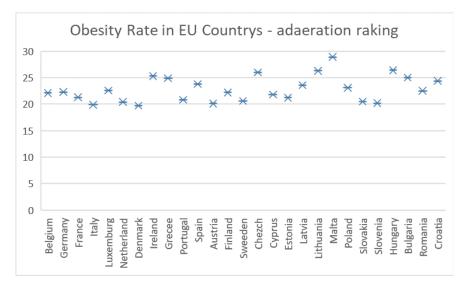


Fig. no.4 Obesity rate in EU countries - EU aderation ranking

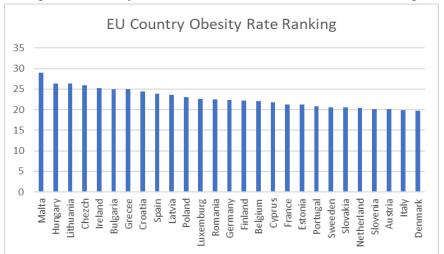


Fig. no. 5 EU contries obesity rate ranking form highest to lowest rate.

Among the most worring statistics for health professionals are those relating to children. One in three children in the EU aged between 6 and 9 years old is overweight or obese [32]. In 2019, WHO estimated that 38.2 million children under 5 years old were obese and overweight. In 2007-2008 WHO European Childhood Obesity Surveillance Initiative observed that children aged 6-9 years form 12 European countries were

obese and overweight 6.0 - 26.6% of boys and 4.6 - 17.3 of girls) [2][33].

Althow overweight and obesity represent a big challenge for society, complication related to obesity require a high attention, those conditions are largely preventable. Educating people regarding food consumption, practicing physical activities and creating a supportive environment can make a change. Individual responsibility can have effect when and where people have access to a healthy lifestyle.

## Conclusion

Obesity is a complex condition; it requires multilevel and integrated solutions. It's implication regard society, healthcare system, individual wellbeing. Professionals research for solutions, they implement various programs in order to hold the society accountable regarding industrialization, food consumption, production, physical activities and even developing an obesity vaccine [2]. Despite the various unknows, people can be relatively optimistic about society ability to control the obesity epidemic.

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