

Excess weight and obesity in a region of the interior of Portugal

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ABSTRACT

Obesity is a serious public health problem that has gained great expression in Portugal. Through several studies it has been verified that there are more and more individuals with excess weight and obesity and that this risk factor begins to have an increasing expression at younger ages. Our study aims to determine the prevalence of overweight and obesity in the adult population of the district of Castelo Branco through the collection of data in each county. It is a cross-sectional, analytical and observational study whose sample collection took place in all municipalities in the district of Castelo Branco, totalling a sample of 11316 individuals, of whom 55.6% belonged to the female gender ($n = 6292$) and 44.4% to males ($n = 5024$), with ages between 18 and 101 years, mean of 58.12 and standard deviation of 17.96 years. Of the total number of subjects in the study sample, 44.7% were overweight, 18.8% were obese, 0.9% were underweight, while 35.6% were within their normal range. The mean body mass index (BMI) was 26.62 kg / m², with a standard deviation of 4.11 kg / m², where the minimum BMI was 15.57 and the maximum was 50.78 kg / m². The results show that there is a high prevalence of overweight and obesity in the adult population of the region. **Keywords:** Prevalence; Obesity; Body mass index.



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INTRODUCTION

Obesity is a pathology of multifactorial origin, which tends to be increasingly present in modern societies, thus becoming an important marker of risk for cerebro-cerebrovascular pathologies. Considering the high morbimortality rate in Portugal and in the world, it is necessary to study the prevalence of cerebrovascular and cerebrovascular risk factors in order to be able to act in their re-education and prevention.

MATERIAL AND METHODS

The collection of the sample was carried out by the researchers in all the municipalities of the district of Castelo Branco according to inclusion criteria defined for the investigation. Individuals who agreed to participate in the study responded to a questionnaire that had been previously tested and signed an informed consent. This research was approved by an Ethics Committee.

Participants

After all the collected data were collected, a total of 11316 individuals were obtained, in which 55.6% were female ($n = 6292$) and 44.4% were male ($n = 5024$), aged 18 and 101 years, and an average of 58.12, with a standard deviation of 17.96 years.

Measures

For the BMI study, the individuals were grouped according to the classification of the World Health Organization (WHO): having low weight $<18.5 \text{ kg/m}^2$; normal weight was $18.5 - 24.9 \text{ kg/m}^2$; excess weight is $25 - 29.9 \text{ kg/m}^2$; and obesity when $> 30 \text{ kg/m}^2$ (Mancia and Fagard, 2013).

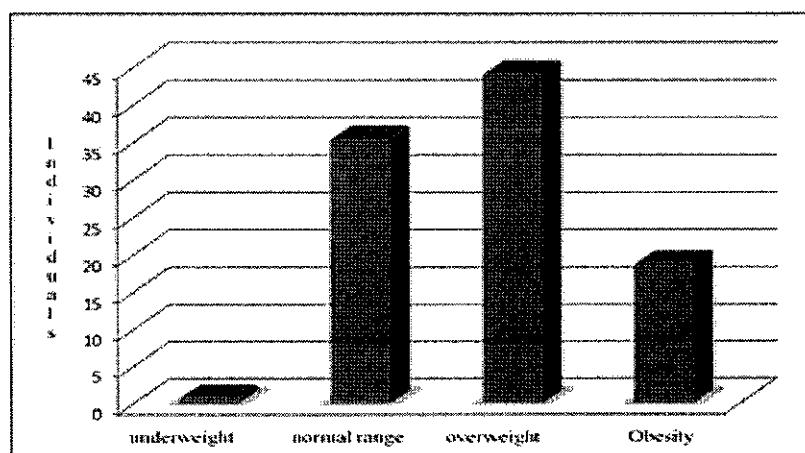
Procedures

To determine the BMI of each individual, the weight was measured by means of a calibrated digital scale and the height confirmed by the official Portuguese identification card.

Analysis

The collected data were inserted, analysed and treated with the statistical analysis program SPSS® (Statistical Product and Service Solution) version 22.0.

RESULTS



Of the total number of subjects studied, 44.7% were overweight, 18.8% were obese, 0.9% were underweight, while 35.6% had their weight within normal values, as can be check on the chart. The mean BMI was 26.62 kg / m², with a standard deviation of 4.11 kg / m², where the minimum BMI value was 15.57 and the maximum BMI was 50.78 kg / m². Thus, it is verified that the majority of respondents are overweight.

DISCUSSION

The constant evolution of modern societies and their adaptation to new habits of life are increasingly related to the increase in the prevalence of cardiovascular risk factors. Obesity is one of these risk markers and is increasingly present in populations. The picture of the National Health System of 2018 reveals that 53.3% of the Portuguese population in the central region is overweight or obese (Ministry of Health, 2108), a figure lower than that found by us that reveals that 63.5% of the population studied is overweight or obese, which can be explained by the known aging of the population of the interior, region where the sample was collected and which meets the report that states that 8 out of 10 elderly people have overweight. When we compare our results with other studies conducted at a national level, and do not differentiate the prevalence's between the coast and the interior, we realize that the prevalence found by us is always higher, as is the case of the AMALIA study that refers to a percentage of obesity was lower than in our study (9.3%). However, when the overweight variable was analysed, the value was more concordant (42.3%) (Perdigão and Rocha, 2011). Still comparing the reality we found with the results of a study by Silva and Petroski (2012) in the population of Florianopolis we found that the results show that the prevalence of overweight is 51.9% and that of obesity is 16 , 1% values very similar to those found by us. In all the mentioned studies, including ours, we verified that it is in the category of excess weight that is the greater percentage of individuals. It is described that the practice of physical exercise can have a positive influence on dyslipidaemia, insulin resistance, obesity and the presence of arterial hypertension or its prevention and that it is most advisable to have a regular exercise practice at least 3 times a week for a period of more than 30 minutes (Machado and Alves, 2010). According to Ruivo and Alcântara (2011) about 57.0% of the European population does not practice physical activity. Through our results, we verified a high prevalence of sedentary lifestyle in the studied sample (75.9%). In the national portrait of 2018 it is mentioned that obesity is related to the lack of regular practice of physical activity, sport and / or programmed leisure, even saying that only 41.8% of the population practice some physical activity programmed (Ministry of Health , 2018). This fact, together with the aging population of the interior of Portugal, may explain the high prevalence rate of overweight and obesity found.

CONCLUSIONS

It is necessary to raise the awareness of the population about the need for exercise programs, better eating habits and the adoption of a healthy lifestyle.

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