RESEARCH ARTICLE

FREQUENCY AND RISK FACTORS ASSOCIATED WITH OBESITY

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ARTICLE INFO

ABSTRACT

Objective: To determine risk factors in the 25- to 55-year-old population who visited to the Community Hospital of Palizada, Campeche during the period from Augist 2015 to July 2016.
Materials and Methods: A cross- Analytical, observational and descriptive, including patients attending the Community Hospiatl of Palizada, Campeche, 114 met the inclusion criteria, 57 male and 57 female.
Results: Of the 114 patients evaluated: 23 (2.17%) were within the normal weight limit, 51% (44.73%) were overweight and 40 (35.08%) were found to be diagnosed with obesity. Of the 40 patients diagnosed with obesity, 19 were male and 21 were female, 25 of which were in obesity grade 1, 12 were in obesity grade ll and three in obesity grade III, extreme or morbid. Patients with grade III obesity were found to be female.
Conclusions: Obesity is a Public Health problem characterized by excess body mass, which is an important risk for chronic degenerative diseases.

INTRODUCTION

Obesity is an energy balance disorder. The World Health Organization (WHO.2002), considers obesity as a global epidemic since there are more than 1 billion adults overweight and obese (Caterson and Gill, 2002; OMS, 2002). It is a chronic multi-causal disease, considered a chronic condition characterized by excessive storage in the fatty tissue in the body. It is accompanied by alterations in metabolism and is associated with endocrine, cardiovascular and musculoskeletal pathology. (BAILLET, Esquivel Laura, 2008)Obesity is a risk factor for hepatobiliary, pulmonary, cardiovascular, joint, and various types of cancer, Diabetes Mellitus, Systemic Arterial Hypertension; among other. (U.S.A. Preventive Sevices Task Force, 1996) In those individuals with a BMI greater than or equal to 22, it is likely that Type 2 diabetes mellitus will occur in the future. (National Institute of Health. Clinical Guidelines on The Identification, 1998)The WHO (2000) considers that the cut-off points of the BMI to classify the adult population are 25, 20, 25 and 40 kg / m², corresponding to the degrees of overweight and obesity grades l, ll and lll. The Spanish Society for the Study of Obesity (SEEDO) (SEEDO. Consenso SEEDO 2007) also considers normal values for BMI between 18.5 and 24.9 fg / m².

The formula for knowing the BMI is the following:

BMI = Weight (kg) ÷ height (m²)

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BMI: WEIGHT (Kg) / HEIGTH (m) / HEIGHT (m) x 10,000
Results according to WHO:
BMI <18.5 Low weight
BMI of 18.5-24.9 Normal
BMI of 25.0 - 29.9 Overweight
BMI> 30.0-34.9 Obesity grade 1
BMI of 35.0-39.9 Obesity grade ll
BMI> 40.0 Morbid obesity or grade III

In general, there are three types of obesity:

Obesity Class I -IMC from 30 to 34.9
Obesity Class II -IMC 35 to 39.9
 Obesity Class III -IMC of 40 or more

According to the distribution of body fat there are the following types:

Obesity Android: It is located on the face, neck, trunk and upper abdomen. It is the most frequent in men.

Obesity Ginecoide: It predominates in the lower abdomen, hips, buttocks and glutes. It's more common in women.

Studies of obesity

In Mexico, the 2006 National Health and Nutrition Survey (ENSANUT 2006) found a prevalence of overweight and obesity for men and women of 71.9% and 66.7%, respectively. (Secretaría de Salud, 2006)In Mexico and throughout Latin America, epidemiological data reveal that in the last 20 years a process called the epidemiological transition has been experienced, in which the main causes of death are no longer infectious but chronic-degenerative diseases. (Secretaría de Salud, 1998; Berkowitz Ross) It is inferred that the foods consumed, rich in fat, sugar and flour, are related to the morbidity in the Mexican country; Coupled with the presence of socio-cultural aspects, such as considering that a "good diet" consists of consuming "more food". In a compilation of national surveys on the prevalence of obesity in the Mexican Republic, it was found to be 35%.(GUEVARA Chacabana, 2006) Hernández *et al*. Found that the prevalence of obesity in women aged 15 to 49 years in the north of the country is 35.3%, the center with 24.1%, Mexico City with 21.9% and finally the south 23.7%. (GUEVARA Chacabana and Gamaniel Raúl, 2006; TRUETA, Josep, 2004)This set of data caused the World Health Organization to declare obesity in 1995 and to draw attention in 1997 to the immense costs that this pathology entails in public health. In 1998, the American Heart Association (AHA) referred to the lack of action linked to the control of obesity and reclassified it as a modifiable major risk factor for the development of coronary disease. (DÍAZ, Mónica, 2005) In 1999, the director of the Centers for Disease Control (CDC) said that the obesity epidemic should be treated as seriously as any epidemic caused by an infectious agent. (DÍAZ, Mónica, 2005) In 2004, based on 156 nationally representative surveys of the adult population in 66 countries, there was a high prevalence of overweight and obesity in both developed and developing countries. More than 30% of the population were overweight in 41 countries and obesity in 42. (GUEVARA Chacabana, 2006; TRUETA, Josep, 2004; DAMASCENO, 2006) At present more than one hundred thousand million adults in the world are overweight, of which 312 million are obese. In addition, 155 million children are overweight or obese. (BAILLET, Esquivel Laura E. Obesidad,

2008) Given the magnitude of this situation, it is necessary to create awareness and carry out research on this subject for our benefit a posteriori and to reduce morbidity and mortality. Internationally the issue has been addressed from the perspective of market failures (WHO 2006; Whitworth, 2011). Among the five market failures, the most documented in the global health sector is related to the economic externality. In the United States some studies have been developed from the perspective of negative economic externality, the cost of the disease attributable to obesity as a risk factor from a national perspective is estimated (Black, 1997; Peckham, 1999; Horton, 2006; NIHR Service Delivery and Organisation programme).

MATERIALS AND METHODOLOGY

A cross - sectional, analytical, observational and descriptive study was carried out in the inhabitants of 25 to 55 years of age who attended the Community Hospital of Palizada, Campeche during the period from August 2015 to July 2016.To the population studied and after giving their consent, the corresponding questionnaire was applied in order to obtain the demographic data and antecedents of the family; Being weighed and weighed for the purpose of calculating their Body Mass Index (BMI = p / t2), being standardized within the World Health Organization Classification pattern. Collecting the necessary information and above all including the patients that have the necessary inclusion criteria and excluding those who did not present them. The variables that were analyzed were: marital status, occupation, schooling, physical activity and drug addiction. Data were analyzed and plotted, data were standardized and, depending on the Body Mass Index, were categorized to find the percentage of obese inhabitants, applying statistical measures of average, median, median and t of student.

Classification of overweight and obesity according to BMI (WHO)

|	Kind of obesity	BMI(Kg/m^2)
Underweight		< 18.5
Normal		18.5-24.9
Overweight		25.0-29.9
Obesity	l	30.0-34.9
	ll	35.0-39.9
Extreme obesity	lll	≥40

Ethical considerations

Appearance plays an important role and is regarded as an essential factor for interpersonal relationships associated with even professional and social success. But it is well known that a thin appearance is closely related to a healthy organism and in optimum conditions. However, at this time the unhealthy living habits of Western society have conditioned a favorable environment for genetically susceptible individuals to develop obesity. The present study will be considered of minimum risk, according to Title II, Article 17, Fraction II of the Regulation of the General Health Law in the field of research for health (1987). It will be of minimal risk, since only records of data like age, sex, name, weight and size will be used; And common physical examination procedures such as weighing and measuring. Article 14, Fraction VII and VIII. The favorable opinion of the research and ethics commissions will be expected. This investigation will be carried out when the authorization of the holder of the institution is obtained. In compliance with Article 16, the privacy of the participant will

be protected. You will be guaranteed that your answers will not be linked to your identity.

RESULTS AND DISCUSSION

After the investigation was carried out it was observed that the number of women and men evaluated were the same with a total of 114, of which 23 patients were within the normal weight limit according to the World Health Organization (WHO), 51 of them were overweight and 40 of these patients were already diagnosed with obesity.
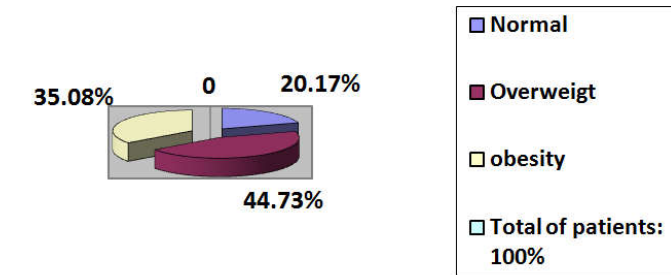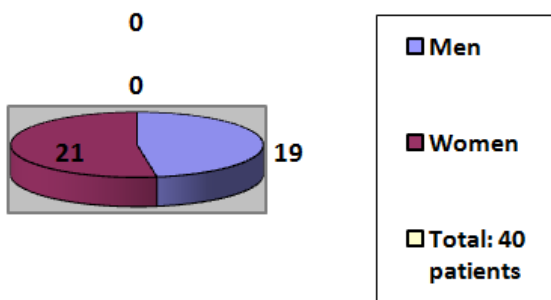

Source: Field research 2015-2016.

Graph 1. Percentage of patients surveyed by Body Mass Index

Graph 01.- This percentage indicates that 23 (20.17%) of the patients were adequately weighed, 51 (44.73%) were overweight and 40 (35.08%) were already obese.

This graph describes the results of the research, which found that of the 114 patients, 23 (20.17%) were found to be adequately weighed, 51 (44.73%) were overweight and 40 (35.08%) were already Obese. It is necessary to mention that the locality of Palizada is a rural community of the state of Campeche, with prevalence of pork consumption and influence by the commercialization of food denominated scrap and the consumption of sodas gaseous drinks, even going to move the natural foods that are produced in the community.
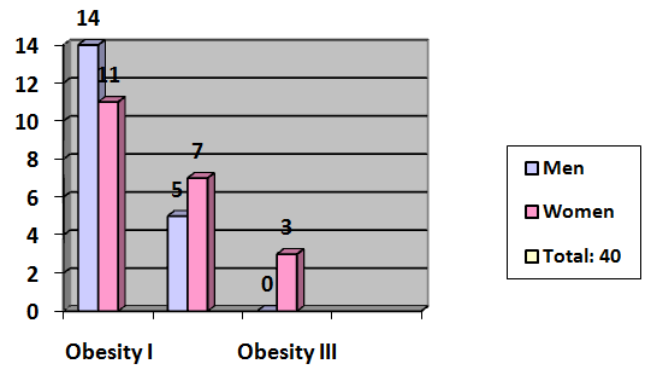

Source: Field research 2015-2016.

Graph 2. Number of patients with Diagnosis of Obesity

Graph 02. - This graph shows that 40 (35.08%) of the patients with the diagnosis of obesity, 19 are men and 21 women. Finding prevalence in the condition of woman.

Graph 03. - Of the 40 obese patients 25 were staged in Obesity I, 12 in Obesity II and only three in Obesity III, Extreme or Morbid. Although the 40 patients present a risk condition when they are staged as obese, 13 (33%) of them present a potential condition to present chronic degenerative diseases.
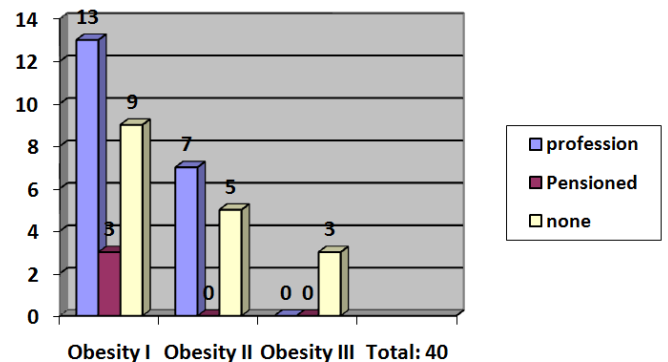

Source: Field research 2015-2016.

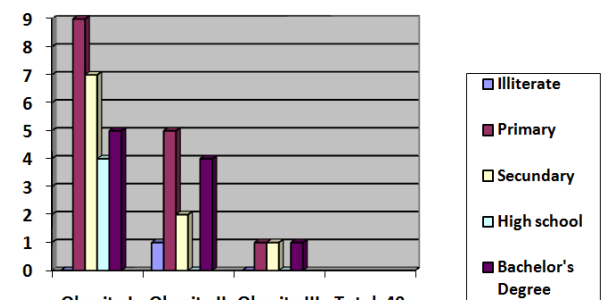**Graph 3. Number of men and women with obesity**

Source: Field research 2015-2016.

Graph 4. - Marital status of patients with obesity
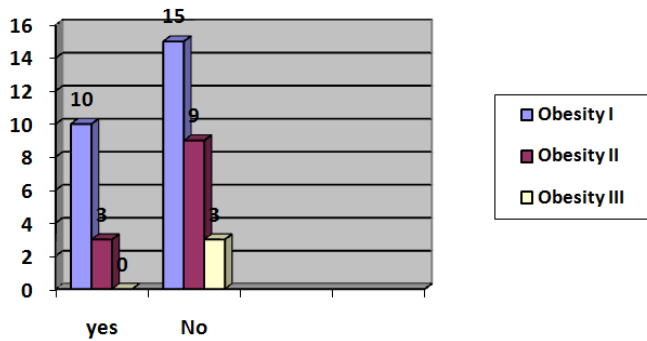

Source: Field research 2015-2016.

Graph 5. Occupation of patients diagnosed with Obesity

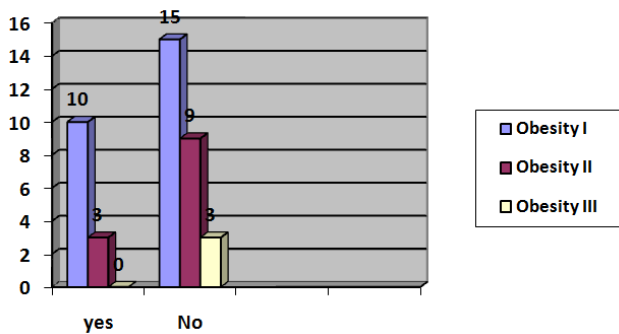Source: Field research 2015-2016.

Graph 6. Degree of schooling of patients diagnosed with Obesity

Graph 04, 05 and 06. The majority of patients observed were of marital status (28), single (8) and widowed (4). With profession 20, pensioners three and none 17. With primary schooling 15, secondary school 10, high school Four, bachelor's degree 10 and an illiterate. It is summarized that 26 (65%) of the patients have a low educational instruction, therefore, it is inferred that in the studied patients, schooling may be related to schooling.

Source: Field research 2015-2016.

Graph 7. Number of obese patients who consume intoxicating drinks

Source: Field research 2015-2016.

Graph 8. Number of patients with obesity with smoking

In graphs seven and eight most patients stated that they did not play any sport, and there were drug addictions, such as ingestion of intoxicating drinks, especially in patients with Type II and III Obesity.

Conclusions and Recommendations

Obesity has ceased to be seen as a purely aesthetic problem and is assumed to be a major challenge for health personnel, and is currently a problem to be faced in the different health systems of both developed and developing countries. development. Obesity is characterized by excess fat in the body and occurs when the body mass index in the adult is greater than 30 kg / m2 being a known risk factor for chronic diseases such as Cardiopathies, Diabetes Mellitus 2, Hypertension and some forms of Cancer, suggesting its etiology environmental, psychological and genetic factors, affecting anyone of different race, creed and socioeconomic status and educational. Therefore, it is necessary to intentionally search for the incidence and risk factors that accompany it, as currently seven out of 10 Mexican adults are obese or overweight, and three out of five children are obese by eating patterns learned, in addition Fact that not treating obesity in time reduces from 15-20 years of life. The results of

the investigation in the Community Hospital of Palizada, Campeche, report patients at risk, as there were 40 (35.08%) obese and 51 (44.73%) were overweight. Of the total number of obese people (40), 13 (33%) of them presented a potential condition for chronic degenerative diseases, 21 (53%) are women, 28 (70%) are married, 20 with a profession, 26 (65%) have low educational instruction, 13 (33%) have an additional risk factor that is alcohol consumption, and five (13%) have smoking. The results lead to the idea that it is essential to raise awareness and educate the general population about the benefits of sports practices, coupled with a balanced diet, as well as control of drug addiction through public health, and fundamentally direct educational actions Of the population towards a change in lifestyle, so that it is healthy and with it the prevention of chronic degenerative diseases that represent a public health problem in our country.

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