73 - PREVALENCE OF OBESITY IN ELDERLY IN VITÓRIA

ELIANE CUNHA GONÇALVES1,
JOSÉ FERNANDES FILHO
1.FACULDADE ESTÁCIO DE VITÓRIA; 2. UNIVERSIDADE FEDERAL DO RIO DE JANEIRO; VITÓRIA, ES, BRASIL
elianecgc@hotmail.com

1.INTRODUCTION

The elderly population (over 60 years old) due to the increase in life expectancy has required a great number of researches related to this population and as a consequence of this increase in longevity, there are changes in the epidemiological and nutritional profile, with a predominance of non-transmissible chronic diseases, the most advanced age groups (CALDWELL, 2001).

Recent IBGE data showed that the prevalence of obesity, according to the body mass index (BMI) of 30 kg / m2 or greater in the Brazilian population, increased in all age groups and was not different in the elderly, where it reached 17, 1% in the age group of 55 to 64 years, 14% in 65 to 74 years and 10.5% in the elderly with 75 years and over.

According to epidemiological studies in the elderly, nutritional disorders are associated with the risk of morbidity and mortality (VISSCHER et al., 1994). Although it is an important predictor for morbidity and mortality in the elderly population, little is known about the relationship between BMI and aging in Brazil, but the risk factors are increased when the individual is obese. (SANTOS AND SICHIERI, 1994)

According to the criteria recommended by the WHO that divides into overweight and obese, the same criteria for adults and elderly, there are discussion points, because changes in body composition, associated with the aging process, should be considered. (CERVI, FRANCESCHINI, PRIORI, 2005)

Other cut-off points can be found as proposed by Lipschitz et al. (2004), which is similar to that used by the Centers for Disease Control and Prevention (CDC) in the National Health and Nutrition Examination Survey III (NHANES III) conducted between 1988 and 1994. It considers differences between the sexes, but does not distinguish between low (NHANES III, 1991), changes in body composition that occur in aging, since the elderly present a decrease in height, a decrease in the amount of water and lean mass in the body and a higher percentage of fat, when compared with adult individuals. (CERVI, FRANCESCHINI, PRIORI, 2005)

There is no consensus on the value or cutoff point of BMI that is more adequate to evaluate obesity in the elderly, including that there are no studies in Brazil to evaluate BMI as a marker of adiposity in the elderly (SANTOS AND SICHIERI, 1994). According to the above, the objective of the study was to estimate the prevalence of obesity in the elderly in Vitória (ES).

2 METHODOLOGY

A cross-sectional study was carried out on the elderly in Vitória, 85 males and 50 females between 60 and 92 years.

For the calculation of the sample size, we considered: 95% confidence level, using a pilot study with 17 individuals to calculate the sample value. There were thus 85 male and 50 female subjects.

The level of obesity was defined by the BMI [weight (kg) / height (m2)], calculated from data collected by the researcher. Measurements of body mass and height were used according to Fernandes Filho (2004). The BMI classification was performed according to two criteria; the WHO that uses the same cut-off points for adults: low weight BMI <18.5kg / m2, IMC between 18.5kg / m2 and 24.9kg / m2, BMI overweight between 25 and 29.9 kg/m2 and obesity BMI ≥ 30 kg / m2; and the recommendation of Lipschitz et al .: low weight BMI <22kg / m2, BMI eutrophy between 22 and 27kg/m2 and overweight BMI> 27kg/m2. Thus, we worked with two dependent variables: BMI> 27kg/m2 and BMI ≥ 30kg/m2. SPSS20 software was used for the statistical treatment.

3. RESULTS

Table 1: BMI of elderly men and women. Vitória, Espírito Santo, Brazil, 2000 (N = 135).

SEX	AGE (YEAR)	BODY MASS (KG)	STATURE (CM)	BMI(KG/M²)
FEMALE	67,62±5,87	64,27±11,11	153,86±5,23	27,11±4,59
MALE	69,55±5,89	77,32±13,35	166,16±6,0	29,64±4,14

* There was no significant difference between the sexes

The mean age of the sample was 67.62 ± 5.87 years for the female sex and 69.55 ± 5.89 years for the male sex.

According to the WHO that has the cutoff point: low weight (BMI <18.5kg/m2); eutrophy (IMC: 18.5-24.9kg/m2); overweight (BMI: 25-29.9 kg/m2); obesity (BMI ≥ 30 kg/m2); both sexes are overweight according to table 1.

According to Lipschitz et al. with cut-off point: low weight (BMI: <22 kg/m2); eutrophy (BMI: 22-27 kg/m2); overweight / obesity (BMI> 27kg / m2), both sexes are obese.

4. DISCUSSION

The prevalence of obesity in the elderly in this study was characterized by the high prevalence of obesity according to Lipschitz et al. mainly in males and overweight according to the WHO. This result is worrisome on several aspects, mainly due to the association of obesity with several non-transmissible chronic diseases, including degenerative diseases, which increase morbidity and mortality and impact on the health system, besides reducing the quality of life of the elderly. (SILVEIRA, KAC AND BARBOSA, 2009)

Obesity is a worldwide health problem that is growing all over the world. It is common among women and urban populations, as in the case of Vitória, which is a capital city. In the South and Southeast, obesity stands out from the rest of the country. higher prevalences (Tavares and Anjos, 1999). METHODS: A multicenter study of elderly Brazilians, followed at

outpatient clinics, identified 36% of women with BMI ≥ 27.3kg / m2 and 22% of men with BMI ≥ 27.8kg / m2, differing from those presented in the study that found a higher prevalence in males,

A possible limitation in the present study is the use of the measures of weight and height mentioned for the calculation of BMI highlighting a study done by Silveira et al. (2007) who developed a linear regression equation for BMI correction when necessary. Moreover, in cross-sectional studies, it refers to the possibility of bias of reverse causality, the relationship between physical activity and obesity should be considered. (Caldwell, 2001)

In several countries, it is known that the diagnosis of obesity is not the same when comparing body fat percentage and BMI. It seems to be a mistaken assumption that BMI measures adiposity in all age groups, notoriously in aging (SANTOS AND SICHIERI, 2004). Thus, changes in body composition in the aging process do not seem appropriate to use the same cut-off point of BMI of adult populations to classify obesity in the elderly. In accordance with the above, it is necessary to study more in depth about this correlation, besides other anthropometric methods in the elderly.

5. CONCLUSION

A higher prevalence of obesity was found in both sexes according to Lipschitz et al., Mainly in males. According to WHO, both sexes are overweight, but the male sex, which is 29.6 kg / m2, is closer to the obesity index. However, there was no significant difference in both sexes.

According to the data obesity / overweight is much more prevalent. Thus, it is necessary to establish practices for monitoring BMI, to direct specific interventions, as well as prevention and control of obesity in programs aimed at health promotion and quality of life of the elderly, especially regarding the practice of physical activity by the process of sarcopenia.

REFERERENCES

Barreto, SM, Passos VMA, Lima-Costa MFF. Obesity and underweight among Brazilian elderly. The Bambuí Health and Aging Study. Cad Saúde Públi- ca 2003; 19:605-12.

Bedogni G, Pietrobelli A, Heymsfield SB, Borghi A, Manzieri AM, Morini P, et al. Is body mass index a measure of adiposity in elderly women? Obes Res 2001; 9:17-20.

IBGE – Instituto Brasileiro de Geografia e Estatística,

Caldwell, JC. Population health in transition. Bull World Health Organ 2001; 79:159-60.

Cervi A, Franceschini SCC, Priori SE. Análise crítica do uso do índice de massa corporal para idosos. Rev Nutr 2005; 18:765-75.

Lipschitz, DA. Screening for nutritional status in the elderly. Prim Care 1994; 21:55-67.

Movsesyan L, Laszlo B, Philip JL, Christiansen C, Svendsen OL. Variations in percentage of body fat within different BMI groups in young, middle-aged and old women. Clin Physiol Funct Imaging 2003; 23:130-3.

National Center for Health Statistic, Centers for Disease Control and Prevention. National Health and Nutrition Examination Survey (NHANES III). Atlanta: National Heart, Lung and Blood Institute; 1991.

OMS - World Health Organization. Obesity: preventing and managing the global epidemic. Geneva: World Health Organization; 1998.

Santos, DM, Sichieri, R. Índice de massa corporal e indicadores antropométricos de adiposidade em idosos. Rev Saúde Pública 2005; 39:163-8.

Silveira, EA, Kac, G; Barbosa, LS; Prevalência e fatores associados à obesidade em idosos residentes em Pelotas, Rio Grande do Sul, Brasil: classificação da obesidade segundo dois pontos de corte do índice de massa corporal, Cad. Saúde Pública, Rio de Janeiro, 25(7):1569-1577, jul, 2009

Silveira, EA, Lopes, ACS, Caialfa, WT. Avaliação do estado nutricional de idosos. In: Kac G, Sichieri R, Gigante DP, organizadores. Epidemiologia nu- tricional. Rio de Janeiro: Editora Atheneu; 2007. p. 105-25.

Tavares, EL, Anjos. LA. Perfil antropométrico da população idosa brasileira. Resultados da Pesquisa Nacional sobre Saúde e Nutrição. Cad Saúde Pú- blica 1999; 15:759-68.

Visscher, TL, Seidell, JC, Menotti, A, Blackburn, H, Nissinen, A, Feskens, EJ, et al. Underweight and overweight in relation to mortality among men aged 40-59 and 50-69 years: the seven countries study. Am J Epidemiol 2000; 151:660-6.

PREVALENCE OF OBESITY IN ELDERLY IN VITÓRIA

To estimate the prevalence of obesity in the elderly according to two cut-off points of body mass index (BMI). The cross-sectional population-based study of elderly residents in Vitória, ES, Brazil. The BMI was evaluated in 135 elderly individuals, 85 male and 50 female, based on body mass and height, referred to and validated. A descriptive analysis and a parametric t-test (p≤0.05) were used to analyze the two variables to define obesity: BMI> 27kg / m2 and BMI ≥ 30kg / m2, proposed by Lipschitz and the World Health Organization, respectively. The mean age of the sample was 67.62 ± 5.87 years for the female sex and 69.55 ± 5.89 years for the male sex. According to WHO, both sexes are overweight. According to Lipschitz et al. both sexes are obese. However, there was no significant difference in both sexes. According to the data, obesity / overweight is much more prevalent. Thus, it is necessary to establish practices for monitoring BMI, target specific interventions, and prevention and control of obesity in programs aimed at promoting health and quality of life of the elderly.

Key - words: Elderly; Obesity; Body mass index; Prevalence

PRÉVALENCE DE L'OBÉSITÉ DANS LA VICTOIRE DES PERSONNES ÂGÉES

Estimer la prévalence de l'obésité chez les personnes âgées en fonction de deux points de coupure de l'indice de masse corporelle (IMC). L'étude transversale en population basée sur les résidents âgés à Vitória, ES, Brésil. L'IMC a été évalué chez 135 personnes âgées, 85 hommes et 50 femmes, en fonction de la masse corporelle et de la taille, mentionnées et validées. Une analyse descriptive et un t-test paramétrique (p≤0,05) ont été utilisés pour analyser les deux variables pour définir l'obésité: IMC> 27 kg / m2 et IMC ≥ 30 kg / m2, respectivement proposés par Lipschitz et l'Organisation mondiale de la santé. L'âge moyen de l'échantillon était de 67,62 ± 5,87 ans pour le sexe féminin et de 69,55 ± 5,89 ans pour le sexe masculin. Selon l'OMS, les deux sexes sont en surpoids. Selon Lipschitz et al. les deux sexes sont obèses. Cependant, il n'y avait pas de différence significative entre les deux sexes: selon les données, l'obésité / surcharge pondérale est beaucoup plus fréquente. Ainsi, il est nécessaire d'établir des pratiques de surveillance de l'IMC, de cibler des interventions spécifiques et de prévenir et contrôler l'obésité dans des programmes visant à promouvoir la santé et la qualité de vie des personnes âgées.

Mots - clés: Personnes âgées; L'obésité Indice de masse corporelle; Prévalence

PREVALENCIA DE OBESIDAD EN ADULTOS MAYORES DE VITORIA

Estimar la prevalencia a la obesidad en ancianos de acuerdo con dos puntos de corte del índice de masa corporal (IMC). El estudio transversal de base poblacional en muestra de ancianos residentes en Vitória, ES, Brasil. Se evaluó el IMC, en 135 ancianos, siendo 85 del sexo masculino y 50 del sexo femenino, a partir de la masa corporal y estatura, referidos y validados. Se utilizó análisis descriptivo y test t paramétrico (p≤0,05) con análisis de las dos variables para definición de la obesidad: IMC> 27kg / m2 e IMC ≥ 30 kg / m2, propuesta por Lipschitz y Organización Mundial de la Salud, respectivamente. La edad media de la muestra fue de 67,62 ± 5,87 años para el sexo femenino y 69,55 ± 5,89 años para el sexo masculino. De acuerdo con la OMS ambos sexos se encuentran con sobrepeso. De acuerdo con Lipschitz et al. ambos sexos se encuentran con obesidad. Pero no hubo diferencia significativa en ambos sexos. De acuerdo con los datos la obesidad / sobrepeso es mucho más prevalente. Así, se hace necesario establecer prácticas de monitoreo del IMC, direccionar intervenciones específicas, además de prevención y control de la obesidad en programas orientados a la promoción de la salud y calidad de vida de los ancianos.
Palabras clave: Ancianos; Obesidad; Indice de Masa Corporal; Prevalencia

PREVALENCIA DE OBESIDADE EM IDOSOS DE VITÓRIA

Estimar a prevalência à obesidade em idosos de acordo com dois pontos de corte do índice de massa corporal (IMC). O estudo transversal de base populacional em amostra de idosos residentes em Vitória, ES, Brasil. Avaliou-se o IMC, em 135 idosos, sendo 85 do sexo masculino e 50 do sexo feminino, a partir da massa corporal e estatura, referidos e validados. Utilizou-se análise descritiva e teste t paramétrico (p≤0,05) com análise das duas variáveis para definição da obesidade: IMC > 27kg/m2 e IMC ≥ 30kg/m2, proposta por Lipschitz e Organização Mundial da Saúde, respectivamente. A idade média da amostra foi de 67,62±5,87 anos para o sexo feminino e 69,55±5,89 anos para o sexo masculino. De acordo com a OMS ambos os sexos se encontram com sobrepeso. De acordo com Lipschitz et al. ambos os sexos se encontram com obesidade. Porém não houve diferença significativa em ambos os sexos.De acordo com os dados a obesidade/sobrepeso é muito mais prevalente. Assim, faz-se necessário estabelecer práticas de monitoramento do IMC, direcionar intervenções específicas, além de prevenção e controle da obesidade em programas voltados para a promoção da saúde e qualidade de vida dos idosos.
Palavras – chave: Idoso; Obesidade; Índice de Massa Corporal; Prevalência

Temática 2 – Fisiologia: artigos estritamente de Medicina, Fisiologia do Esporte, Biomecânica, Treinamento e atuação em Saúde