15 - BLITZ HEALTH: PREVENTING AND PROMOTING HEALTH AT FEDERAL EMPLOYEE OF UFMG

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INTRODUCTION

Obesity is one of the most serious public health problems in the world, growing progressively and quickly in several ethnicities, social classes, age groups and is independent of sex. It is a non-transferable, complex disease whose characteristics: long latency period, long asymptomatic course, clinical course is usually slow, prolonged and permanent clinical manifestations with periods of remission and exacerbation and multiple determinations, with a strong environmental component.

The causes of obesity may be due to several factors related to excessive intake of unhealthy foods, progressive reduction of physical activity, genetic, metabolic, behavioral, and cultural factors. Excess body weight is a multifactorial problem and is related to the emergence of several chronic diseases not transmissíveis3 such as hypertension, hypercholesterolemia, diabetes mellitus, cardiovascular diseases and some forms of cancer.

In contrast to the increased incidence of obesity in the world population, it is observed that the level / duration of physical activity practiced is decreasing, increasing the number of sedentary individuals and contributing to the rise in obesity.

The United States Department of Health and the World Health Organization (WHO) reported that physical inactivity is a major public health problem and its eradication is considered a priority for improving the health of people of all ages. Furthermore, the WHO also shows that sedentary lifestyles increase all-cause mortality, double the risk of cardiovascular disease, diabetes and obesity, and increase the risks of colon cancer, high blood pressure, osteoporosis, lipid disorders, depression and anxiety . Pereira, 2003 et. al. say sedentary lifestyles and nutritional habits are a major risk factor in the development of obesity worldwide. Thus, physical inactivity has significant influences on obesity of individuals.

With the advent of obesity in contemporary society, including in developing countries, it became necessary to the improvement of instruments able to correlate excess body fat to diseases associated with it. Stand out among these indicators Abdominal Circumference (AC) and the Body Mass Index (BMI).

Accordingly, the assessment of body fat, especially abdominal region, it is important to report the diagnosis of overweight / obesity. Anthropometric techniques such as Body Mass Index (BMI) and abdominal circumference (AC), used together or separately, are frequently employed in this assessment and, consequently, the realization of risk for cardiovascular disease. In addition, BMI and CA are easy to perform, inexpensive and suitable techniques for daily practice. Other studies have also shown that the combination of the measured AC BMI offers a good alternative for determining the risk and helps to reduce the limitations of each of the assessments isolated.

Thus, the aim of this study was to analyze the values of waist circumference, body mass index, physical inactivity, related to age and sex in a sample of 197 people aged between 16 and 83 years.

METHODS

The survey was conducted in the second half of 2012, the week of the knowledge and culture held at the Federal University of Minas Gerais (UFMG), it occurred to Blitz Health with the aim of assessing the population consists of university students, staff and faculty.

The Blitz formed by physical education students from the 5th to the 8th of the university itself, which were responsible for measure / evaluate the weight, height, waist circumference, perform the calculation of Body Mass Index (BMI) and apply a questionnaire thresholds of risk factors adapted from the ACMS manual for assessing health-related physical fitness coronary atherosclerotic disease.

The evaluation consisted of nine defining criteria of self reported risk (ANNEX I) factors. Participants' responses could vary: yes, no and do not know. In addition, the participant identification included the name, age, sex, weight, and waist circumference, with the latter two measures by scholars of Physical Education, previously trained to perform such execution. BMI was obtained by measured data of participants and calculated using the formula: BMI = weight (kg) / (Height).

The measurement of waist circumference was at the midpoint between the lower costal margin and the iliac crest. The adapted by the World Health Organization (WHO) classification presented below is based on international standards developed for adults of European descent and the present study used to compare the values measured for each age group.

Table 1 - Combination of measures of waist circumference and BMI to assess obesity and risk for diabetes and cardiovascular disease

Abdominal Circumference (cm)	Abdominal Circumference (cm		
102+ 88+	Men: 94-102 Women: 80-88	IMC (kg/m2)	Risk of metabolic complications
-	-	< 18,5	underweight
raised	-	18,5-24,9	healthy Weight
high	Raised	25-29,9	overweight
High- pitched	High	⩾ 30	Obesity

RESULTS

The total number of subjects evaluated was 196 and 133 women and 64 men, age ranged between 16 and 84 years for both sexes. The individuals were divided into groups subdivided according to age.

Table 2: Number of individuals distributed by age and sex.

TOTAL FOR INDIVIDUALS AGE.	MEN	WOMEN	AGE
124	38	85	16 - 25
22	10	12	26 - 35
15	5	10	36 - 45
17	2	15	46 - 55
19	9	10	above 55
197	64	133	total

Analyzing the total number of study participants, it was noted that 47.44% of people surveyed are sedentary; 25.38% are classified as overweight or obese, and 35.53% have increased or increased risk factors for cardiovascular diseases waist circumference. 134 women were evaluated, these 51.49% arise from sedentary; 16.41% are classified as overweight or obese as 7.46% and 41.04% have cardiovascular risk with increased or increased waist circumference. As regards the 63 men evaluated, it was found that 44.44% are classified as inactive; 23.80% as overweight and obese 4.76%, and 23.80% have cardiovascular risk with increased or increased waist circumference.

In the range of 16 - 25 years comprised 85 women and 38 men was observed that 50.58% of women are sedentary while 39.47% of men are also in this classification. Already by calculating the BMI 11.76% of women are considered overweight or obese, however, this value for males is 21.05%. The values of waist circumference indicate that 27.89% of women at increased risk or very increased to cardiovascular disease and men present 21.04%.

Among individuals who are in the age group 26-35 years of being 13 women and 9 men found that 61.53% of women are sedentary and men represent 44.44%. The values for overweight and obesity for women reach 38.45% in contrast, men represent 22.22% of this ranking. The risk increased, and increased waist circumference for women accounted for 54.04% and 22.22% for men

In the group of people who have age between 36-45 years, 10 women and 5 men 70% of women were classified as sedentary while men accounted for 40%. BMI presented in 40% of women and 60% of men are overweight or obese. Already waist circumference for women obtained a value of 70% and men 40% increased risk for cardiovascular disease.

Individuals of age 46-55 years of being 15 females and 2 males available figures for the inactivity of 40% for women and 50% men. Were classified as overweight and obese 39.99% of women and no men in this age group. It was noted that for values of waist circumference 53.33% of women and no men are at risk for cardiovascular disease according to the parameter used.

Finally, the group of 56 years and above contained 10 women and 9 men had values of 60% and 66.66% respectively for women and men were considered sedentary. Already 70% of women and 55.55% of men were classified as overweight or obese, and abdominal circumference measurements indicate that 90% of women and 33.33% of men have high values for this measure.

Table 3- Women participating in the study

Abdominal Circumference (%)	Overweight / Obesity (%)	Sedentarism (%)	Number of person ()	Age (years)
27,89	11,42	48,36	85	16 -25
54,04	38,45	61,53	13	26-35
70,00	40,00	70,00	10	36-45
53,33	39,99	40,00	15	46-55
90,00	70,00	60,00	10	55 - above

Table 4- Men study participants

Abdominal Circumference (%)	Overweight / Obesity (%)	Sedentarism (%)	Number of person ()	Age (years)
21,04	21,05	39,47	38	16 -25
22,22	22,22	44,44	9	26-35
40,00	60,00	40,00	5	36-45
0	0	50,00	2	46-55
33,33	55,55	66,66	9	56 - above

DISCUSSION

The results of this study show that increasing age had higher values than sedentary index in both sexes except in the group of women aged 46-55 years and men 36-45 years there was a drop from the track previous age. Already overweight / obesity in women examined also obtained increased as the age increased in men while no such increase was observed in all groups, whereas in the group of 46-55 years showed no overweight / obese and also do not presented individuals at risk for increased waist circumference. This may have been allocated by the number of individuals in this age group is reduced compared to the other groups. Regarding the measurement of waist circumference, we found that for women the values of CA will be increased as the age increased, except for the age group of 46-55 years has obtained a drop from the previous group.

In females it was observed that when there was a decrease in the values of sedentary lifestyle also had declines in the values of CA observing a strong correlation between these two parameters for females. It was noticed that with increasing age in the age groups the percentage of sedentary people has also increased in both sexes.

According to Rao, 2006, et. al. the frequency of overweight and obesity was high especially in women. The present study also showed that women aged 36-45 years had a high level of inactivity, which may have contributed to the increase in the percentage number of the risk of increased waist circumference. This finding was also demonstrated in several other studies.

The CA is the anthropometric method that reflects indirectly the content of visceral fat in the body is epidemiological indicator for the diagnosis of overweight and obesity. But the BMI is only an epidemiological indicator for the diagnosis of

overweight and obesity. The cutoff points of BMI for adults are identified based on the association between BMI and chronic diseases or mortality (Table 1).

The results of this study reveal that 23.87% of the women studied are overweight (BMI ≥ 25 kg / m2), compared to 28.56% of men. According to the Household Budget Survey (POF) 2008-2009 held jointly by the IBGE and the Ministry of Health, to analyze data from 188 000 Brazilian people at all ages, we observed that obesity and excess weight have increased rapidly in recent years. In this survey, we realized that 50% of men and 48% of women are overweight, and of those, 12.5% of men and 16.9% of women are obese.

Waist circumference is an important measure of risk for cardiovascular disease even in people who have less than 30 kg / m2 for women especially since in this study it was observed that 40.60% of them had increased or greatly increased risk for cardiovascular diseases BMI while men showed 21.87% for the same parameter similar fact was also evidenced in the study by Rao et al., 2006 observed that 42% of women and 22.2% of men with increased WC.

CONCLUSION

Given the increasing trend of overweight and obesity in our population and the strong association of these with cardiovascular risk factors becomes important interventions to reduce body weight, particularly abdominal fat so there is the prevention and control of cardiovascular diseases in the population.

Importantly, there are no national cohort studies to define the limits for the Brazilian population relative to CA, becoming larger studies needed for the proper definition of such measures for the Brazilian population.

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BLITZ HEALTH: PREVENTING AND PROMOTING HEALTH AT FEDERAL EMPLOYEE OF UFMG

ABSTRACT

Obesity is one of the most serious public health problems in the world, growing progressively and quickly is a non-communicable disease. It is observed that the level / duration of physical activity practiced is decreasing, increasing the number of sedentary individuals and contributing to the rise in obesity. The aim was to analyze the values of waist circumference, body mass index, physical inactivity, related to age and sex. The study was conducted with officials from the Federal University of Minas Gerais, during the blitz of health in a sample of 196 participants - 132 men and 64 women 16-83 years of sectional study in which we applied the questionnaire thresholds risk factors for atherosclerotic disease were measured and the body mass index (IMB), abdominal circumference (AC) and a sedentary lifestyle of each participant. To examine associations between obesity and

physical inactivity x2 test was used. 50.75% of women are sedentary and men represent 40.62%. 23.48% women and 29.68% of men are overweight or obese. 40.90% women and 21.87% of men had increased / greatly increased cardiovascular risk. Regarding age groups, showed higher CA and overweight / obese group 55 years and above for women and men for the same age group had the highest percentage inactivity. In females fall in the values of physical inactivity were related to declines in value of CA. With increasing age in the percentage of sedentary people has also increased in both sexes. The increasing trend of overweight and obesity in our population and the strong association with these cardiovascular risk factors are important interventions to reduce body weight, particularly abdominal fat so there is the prevention and control of cardiovascular diseases in the population.

KEYWORDS: Health, Obesity, Sedentary

BLITZ SANTÉ: LA PRÉVENTION ET PROMOTION DE LA SANTÉ DES FONCTIONNAIRES UFMG.

RÉSUMÉ

L'obésité est l'un des plus graves problèmes de santé publique dans le monde, de plus en plus progressivement et rapidement est une maladie non transmissible. On observe que le niveau / durée de l'activité physique pratiquée est en baisse, l'augmentation du nombre de personnes sédentaires et contribue à l'augmentation de l'obésité. L'objectif était d'analyser les valeurs du tour de taille, indice de masse corporelle, l'inactivité physique, liée à l'âge et le sexe. L'étude a été menée avec des représentants de l'Université fédérale de Minas Gerais, au cours de la campagne-éclair de la santé dans un échantillon de 196 participants - 132 hommes et 64 femmes de 16 à 83 ans d'une étude transversale dans laquelle nous avons appliqué les seuils de questionnaire les facteurs de risque pour l'athérosclérose ont été mesurés et l'indice de masse corporelle (IMC), la circonférence abdominale (CA) et un mode de vie sédentaire de chaque participant. Pour examiner les associations entre l'obésité et l'inactivité physique test du chi-carré a été utilisé. 50,75% des femmes sont sédentaires et les hommes représentent 40,62%. 23,48% de femmes et 29,68% des hommes sont en surpoids ou obèses. 40,90% de femmes et 21,87% des hommes avaient augmenté / a considérablement augmenté le risque cardiovasculaire. En ce qui concerne les groupes d'âge, a montré CA supérieur et groupe surpoids / obèses de 55 ans et au-dessus pour les femmes et les hommes pour le même groupe d'âge le plus haut pourcentage d'inactivité. Chez les femmes tombent dans les valeurs de l'inactivité physique ont été associée à une diminution de la valeur du CA. Avec l'augmentation de l'âge de la proportion de personnes sédentaires a également augmenté chez les deux sexes. La tendance à la hausse du surpoids et de l'obésité dans notre population et la forte association avec ces facteurs de risque cardiovasculaires sont des interventions importantes pour réduire le poids du corps, en particulier la graisse abdominale de sorte qu'il est la prévention et le contrôle des maladies cardiovasculaires dans la population.

MOTS-CLÉS: la santé, l'obésité, sédentarité

BLITZ SALUD: PREVENCIÓN Y PROMOCIÓN DE LA SALUD FUNCIONARIOS UFMG.

RESUMEN

La obesidad es uno de los más graves problemas de salud pública en el mundo, creciendo progresivamente y de forma rápida es una enfermedad no contagiosa. Se observa que el nivel /duración de la actividad física practicado está disminuyendo, lo que aumenta el número de individuos sedentarios y contribuir al aumento de la obesidad. El objetivo fue analizar los valores de la circunferencia de la cintura, índice de masa corporal, la inactividad física, relacionada con la edad y el sexo. El estudio se llevó a cabo con los funcionarios de la Universidad Federal de Minas Gerais, durante el bombardeo de la salud en una muestra de 196 participantes - 132 hombres y 64 mujeres 16 a 83 años de estudio de corte en la que se les aplicó el cuestionario umbrales se midieron los factores de riesgo para enfermedad aterosclerótica y el índice de masa corporal (IMC), circunferencia abdominal (CA) y un estilo de vida sedentario de cada participante. Para examinar las asociaciones entre la obesidad y la prueba de chi-cuadrado se utilizó la inactividad física. 50.75% de las mujeres son sedentarios y los hombres representan 40.62%. 23,48% mujeres y 29,68% de los hombres tienen sobrepeso o son obesos. 40,90% mujeres y 21,87% de los hombres habían aumentado / aumenta considerablemente el riesgo cardiovascular. En cuanto a grupos de edad, mostró mayor CA y el grupo de sobrepeso / obesidad 55 años y por encima de las mujeres y los hombres por el mismo grupo de edad tenía el más alto porcentaje de inactividad. En las mujeres caen en los valores de la inactividad física se relacionaron con disminuciones en el valor de CA. Con el aumento de la edad en el porcentaje de personas sedentarias también ha aumentado en ambos sexos. La tendencia al aumento del sobrepeso y la obesidad en nuestra población y la fuerte asociación con estos factores de riesgo cardiovascular son importantes las intervenciones para reducir el peso corporal, especialmente la grasa abdominal por lo que es la prevención y el control de las enfermedades cardiovasculares en la población.

PALABRAS CLAVE: Salud, Obesidad, Sedentarismo

BLITZ DA SAÚDE: PREVENINDO E PROMOVENDO SAÚDE DE FUNCIONÁRIOS DA UFMG

RESUMO

A obesidade é atualmente um dos mais graves problemas de saúde pública no mundo, crescendo de forma progressiva e rápida é uma doença não transmissível. Observa-se que o nível/duração de atividades físicas praticadas vem diminuindo, aumentando o número de indivíduos sedentários e contribuindo para o aumento da obesidade. O objetivo foi analisar os valores da medida da circunferência abdominal, índice de massa corporal, sedentarismo, relacionados à idade e ao sexo. O estudo foi realizado com funcionários da Universidade Federal de Minas Gerais, durante a blitz da saúde, em uma amostra de 196 participantes - 132 mulheres e 64 homens de 16 a 83 anos de um estudo transversal no qual aplicou-se o questionário de limiares dos fatores de risco para doenças aterosclerótico e foram mensurados o Índice de Massa Corporal (IMC), Circunferência Abdominal (CA) e o sedentarismo de cada participante. Para verificar associações entre obesidade e sedentarismo foi utilizado o teste Qui quadrado. 50,75% das mulheres são sedentárias e os homens representam 40,62%. 23,48% das mulheres e 29,68% dos homens apresentam sobrepeso ou obesidade. 40,90% das mulheres e 21.87% dos homens apresentou risco cardiovascular aumentado/muito aumentado. Em relação aos grupos etários, apresentou maiores valores de CA e sobrepeso/obesidade o grupo de 55 anos e acima para as mulheres, e os homens para o mesmo grupo etário apresentou maior percentual no sedentarismo. No sexo feminino queda nos valores de sedentarismo relacionaram-se às quedas nos valores de CA. Com o aumento da idade nas o percentual de pessoas sedentárias também aumentou em ambos os sexos. A crescente tendência de sobrepeso e obesidade na população brasileira e a forte associação destes com fatores de riscos cardiovasculares tornam-se importantes intervenções que permitam reduzir o peso corporal, particularmente à gordura abdominal para que haja a prevenção e o controle de doenças cardiovasculares na população.

PALAVRAS-CHAVE: Saúde, Obesidade, Sedentarismo