

**115 - FUNCTIONAL AUTONOMY OF ELDERLY WHO LIVES AT PARQUE DAS ROSAS - BARRA DA TIJUCA; RIO DE JANEIRO**

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**INTRODUCTION**

Over the years the Brazilian elderly population is increasing more and more. 2010 demographic census data, conducted by IBGE, revealed an increase in the population with 65 years or more, which was 4.8 in 1991, passing the 5.9 in 2000 and reaching 7.4 in 2010 (IBGE, 2013). In Brazil, the rate of growth of the elderly population has been systematic and consistent. According to the national survey by Household Sampling-PNAD 2009, the Country had a population of about 21 million people from 60 years or older (IBGE, 2010).

As the elderly population increases, the concern with the quality of their lives grows. The functional autonomy, or also known as functional capacity is one of the most relevant concepts in relation to health, physical fitness and quality of life (CADER, 2006).

Functional capacity can be defined as the potential that the elderly have to decide and act in their lives independently, in their daily lives (MATSUDO SM, 2000).

With regard to this information, a group of researchers of the laboratory of Physiology of exercise (LAFIEX), forming faculty and graduate students of the course of physical education at Universidade Estácio de Sá, Campus Parque das Rosas, performed a battery of tests for evaluating the functional autonomy of the elderly on 23/05/14. Data collection was performed during an event in the institution itself

The objective of this study was to evaluate the risk of coronary heart disease from the measurement of blood pressure before and after the Protocol of the Latin American Development Group to maturity (GDLAM), and by calculation the relationship waist hip ratio (WHR); assess the level of overweight or underweight from the calculation of body mass index (BMI); assess the physical ability of the elderly to perform activities of daily living, using a battery of tests of the GDLAM Protocol.

**MATERIAL AND METHOD**

The present study is characterized by qualitative and descriptive template field. According to Thomas and Nelson (2002), this type of study has many variables where there are no preconceived assumptions and aims to interpret the main phenomenon that observes with emphasis on induction.

The subjects participants totaled 13 elderly individuals, from 60 years of both sexes, residents of Rio de Janeiro, Barra da Tijuca neighborhood located on the West side of the city.

All subjects agreed to participate in this study, were informed of the entire procedure of the proposed research, and signed the term of Participation Allowed in research prepared according to the Ordinance. 196 of 10101996 of the National Council of health (BRAZIL, 1996)

As an instrument of data collection were used a blood pressure measurement apparatus, a scale Filizola, anthropometric tape, a stopwatch, a bedroll, a chair with 40 cm seat height to the ground, and a shirt size G.

**RESULTS**

The study was attended by 13 participants from both sexes, with ages understood between 60 to 88 years (average of  $70.15 \pm 9.33$  years). Of the total of individuals evaluated, 11 were of the female gender (84.7% of the total sample), and 2 male (15.3% of the total sample).

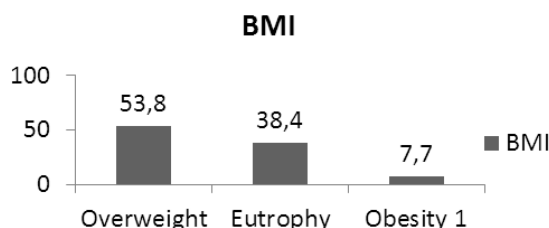


Figure 1: Percentage Distribution of body mass index of evaluated.

The body mass index (BMI) of most evaluated was characterized as overweight. The overall average was 25,85kg/m<sup>2</sup>.

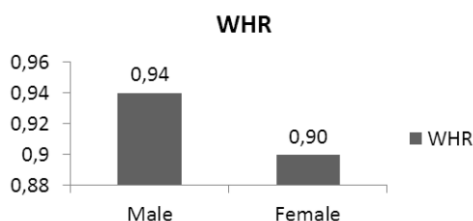


Figure 2: distribution of the results of the relationship waist hip of evaluated.

The relationship waist hip of 6 female evaluated for 60 to 69 years was averaged 0.90 being featured high risk related to coronary artery disease. The single valued male 60 to 69 years had the WHR of 0.94 being featured moderate risk related to coronary artery disease. The rest are not assessed in this age range test.

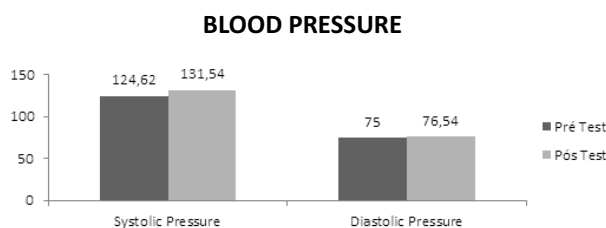


Figure 3: distribution of blood pressure results evaluated.

The initial average systolic blood pressure of 13 assessed was 124.62 mmhg, being considered within normal parameters, initial diastolic blood pressure of 13 assessed was 75mmhg, being considered within normal parameters, the final average systolic blood pressure of 13 assessed was 131, 54mmhg, regarding the initial systolic blood pressure showed a small increase of 6.92 mmhg, being considered within normal parameters, end diastolic blood pressure of 13 assessed was 76, 54mmhg, being observed an increase in arterial pressure despicable end diastolic pressure.

All previous parameters meet the studies of the World Health Organization (OMS).

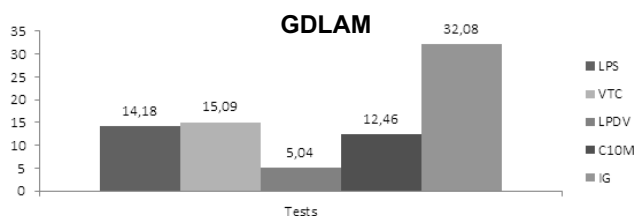


Figure 4: distribution of GDLAM Protocol test results in seconds.

Getting up from a sitting position (LPS), the average time of the participants to achieve the test was of 14.18 seconds, being considered weak according to the table.

Dress up and take off your shirt (VTC), the average time of participants to test was 15.09 seconds, being considered weak according to the table.

Rise of the ventral decubitus position (LPDV), the average time of the participants to achieve the test was of 5.04 seconds, being considered weak according to the table.

Walk 10 meters (C10M), the average time of the participants to achieve the test was of 12.46 seconds, being considered weak according to the table.

General index (GI), the average time from the General index was 32.08 seconds, being considered weak according to the table.

All tests of the GDLAM Protocol had 13 participants of both sexes.

## CONCLUSION

The results obtained from the BMI of evaluated showed that most of them are overweight, this variable is not only on the physical exercise frequency, but also the lifestyle of the elderly. Analyzing the WHR of the volunteers concluded that women have a higher risk related to heart disease. All 13 volunteers reported taking medications to control blood pressure, maybe that's why blood pressure pre and post-workout remained within normal parameters. The results obtained from the GDLAM Protocol suggest that the functional autonomy of the elderly characterized low average in the population of the region, which was expected, since the average age of volunteers was  $13 \pm 70.15$  years.

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**FUNCTIONAL AUTONOMY OF ELDERLY WHO LIVES AT PARQUE DAS ROSAS- BARRA DA TIJUCA; RIO DE JANEIRO****ABSTRACT**

The present study aimed to conduct a battery of tests for evaluating the functional autonomy of the elderly. The subjects participants totaled 13 elderly individuals, from 60 years (average of  $70.15 \pm 9.33$  years) of both sexes. The volunteers were submitted to the Protocol group of Latin American Development to maturity (GDLAM) with gauging of arterial pressure pre- and post-exercise, were evaluated variables of stature and body weight to calculate body mass index (BMI), waist circumference and hip circumference to calculate waist hip ratio (WHR). The results showed that the volunteers evaluated feature overweight (both sexes), the male evaluated presented moderate risk and evaluated presented high female laughter of heart disease by calculating the WHR, the evaluated for both sexes showed pressure within acceptable standards of pre- and post-test. GDLAM protocol tests were applied in all volunteers having an overall average considered weak according to the standard. The results obtained from the BMI of evaluated showed that most of them are overweight, this variable is not only on the physical exercise frequency, but also the lifestyle of the elderly. The results obtained from the GDLAM Protocol suggest that the functional autonomy of the elderly characterized low average in the population of the region, which was expected, since the average age of volunteers was  $13 \pm 70.15$  years.

**KEYWORDS:** Elderly; Functional autonomy; GDLAM.

**AUTONOMIE FONCTIONNELLE DES PERSONNES ÂGÉES DE LA PARC DES ROSES-BARRA DA TIJUCA ; RIO DE JANEIRO****RÉSUMÉ**

La présente étude visait à mener une batterie de tests d'évaluation de l'autonomie fonctionnelle des personnes âgées. Les participants des sujets ont totalisé 13 personnes âgées, de 60 ans ( $70.15 \pm 9,33$  ans) des deux sexes. Les volontaires ont été soumis au groupe de protocole de développement de l'Amérique latine à maturité (GDLAM) avec mesure de la pression artérielle avant et après exercice. Été évalués variables de taille et du poids pour calculer l'indice de masse corporelle (IMC), tour de taille et les hanches pour calculer taille hip ratio (WHR). Les résultats ont montré que les volontaires évalué fonction surpoids (mâles et femelles), le mâle évalué a présenté un risque modéré et évalué présentés haute rires féminins de maladie cardiaque en calculant la WHR, l'évalués pour les deux sexes ont montré la pression dans des normes acceptables de pré- et post-test. GDLAM protocole tests ont été appliqués à tous les bénévoles ayant une moyenne générale considérée comme faible selon la norme. Les résultats obtenus à partir de l'IMC des évalués ont montré que la plupart d'entre eux est en surpoids, cette variable n'est pas seulement sur la fréquence de l'exercice physique, mais aussi le mode de vie des personnes âgées. Les résultats obtenus par le protocole de GDLAM suggèrent que l'autonomie fonctionnelle des personnes âgées caractérisé moyen faible dans la population de la région, qui était attendue, puisque l'âge moyen des volontaires était de  $13 \pm 70,15$  ans.

**MOTS-CLÉS:** Personnes âgées; Autonomie fonctionnelle; GDLAM.

**AUTONOMÍA FUNCIONAL DE LOS ANCIANOS DE LA PARQUE DE ROSAS-BARRA DA TIJUCA; RÍO DE JANEIRO****RESUMEN**

El presente estudio pretende realizar una batería de pruebas para evaluar la autonomía funcional de los ancianos. Los participantes sujetos ascendieron a 13 individuos mayores, de 60 años ( $70.15 \pm 9,33$  años) de ambos sexos. Los voluntarios fueron presentados al grupo de protocolo de desarrollo en América Latina a la madurez (GDLAM) con medición de la presión arterial pre y post ejercicio. Sido variables evaluadas de la estatura y el peso corporal para calcular el índice de masa corporal (IMC), circunferencia de la cintura y la circunferencia de la cadera para calcular el cociente de cintura cadera (RCC). Los resultados mostraron que los voluntarios evaluaron característica sobrepeso (ambos sexos), el macho evaluado presenta riesgo moderado y evaluados presentan alta risa femenina de enfermedades del corazón mediante el cálculo de las horas de trabajo, el evaluado para ambos sexos demostró la presión dentro de los estándares aceptables de pre- y post-test. GDLAM protocolo pruebas se aplicaron en todos los voluntarios con un promedio general considerado débil según la norma. Evaluaron los resultados obtenidos en el IMC de mostraron que la mayoría de ellos tiene sobrepeso, esta variable no está sólo en la frecuencia de ejercicio físico, sino también el estilo de vida de las personas mayores. Los resultados obtenidos con el protocolo de GDLAM sugieren que la autonomía funcional de los ancianos caracterizado bajo promedio en la población de la región, que se esperaba, puesto que la edad promedio de los 13 voluntarios fue  $\pm 70,15$  años y fueron sedentarios.

**PALABRAS CLAVE:** Adultos mayores; Autonomía funcional; GDLAM.

**AUTONOMIA FUNCIONAL DE IDOSOS DO PARQUE DAS ROSAS-BARRA DA TIJUCA; RIO DE JANEIRO****RESUMO**

O presente estudo teve como objetivo realizar uma bateria de testes de avaliação da autonomia funcional dos idosos. Os sujeitos participantes totalizaram 13 indivíduos idosos, a partir de 60 anos ( $70,15 \pm 9,33$  anos) de ambos os sexos. Os voluntários foram submetidos ao Protocolo do Grupo de Desenvolvimento Latino-Americano para a Maturidade (GDLAM) com aferição de pressão arterial pré e pós-exercício. Foram avaliadas as variáveis de estatura e peso corporal para cálculo do Índice de massa corporal (IMC), perímetro de cintura e perímetro de quadril para cálculo da Relação Cintura Quadril (RCQ). Os resultados apontaram que os voluntários avaliados apresentam sobrepeso (ambos os sexos), os avaliados do sexo masculino apresentaram risco moderado e os avaliados do sexo feminino apresentaram alto risco de doenças coronárias pelo cálculo do RCQ, os avaliados de ambos os sexos apresentaram pressão arterial dentro dos padrões aceitáveis pré e pós-teste. Os testes do protocolo GDLAM foram aplicados em todos os voluntários tendo uma média geral considerada fraca de acordo com o padrão. Os resultados obtidos a partir do IMC dos avaliados mostraram que a maioria está acima do peso, esta variável não está somente relativa à frequência de exercícios físicos, mas também ao estilo de vida dos idosos. Os resultados obtidos a partir do protocolo GDLAM sugerem que a autonomia funcional dos idosos média se caracteriza baixa na população da região, o que já era esperado, visto que a média de idade dos 13 voluntários foi de  $\pm 70,15$  anos e eram sedentários.

**PALAVRAS-CHAVE:** Idosos; Autonomia funcional; GDLAM.