152 - CORRELATION OF THE FUNCTIONAL AUTONOMY IN THE DAILY LIFE ACTIVITIES IN AGED HYPERTENSIVE PEOPLE

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INTRODUCTION

The increase of the longevity stimulates the studies produced with aged people and more and more the interests of researchers from different areas (EVELISE et al, 2006). The growth of the aged population in whole world, discloses a concern in relation to the functional capacity that appears as new pointer for the estimate of the health of this age segment. In senility there is a bigger probability of occurrence or involvement with chronic-degenerative diseases and , therefore, the development of incapacities associates to the aging (PINK et al, 2003). The aging can vary sufficiently between the people, as much for genetic factors as for the life style. Related to the life style we can emphasize that the functional autonomy, also known as functional capacity, is one of the most relevants concepts related to the health,fitness and life quality.

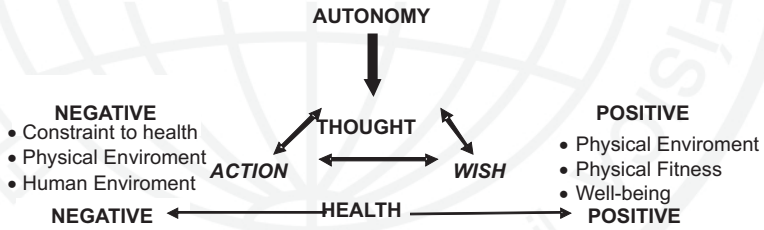
An autonomous person is able to execute independent and satisfactorily daily activities, like to keep social activities and to exert rights and duties of citizen before the society that lives. It can be said that functional autonomy is personal ability that each human has to play the necessary activities that it assures well-being, integrating the three functional areas: biological, psychological (cognitive and affective) and social according to group (WHO, 1998). Knowing and understanding the changes related with the process of aging, specially the changes of the muscle – skeletal system, is possible to intervene more effectively in the prevention of injuries and in the repair of the function and/or improvement of aged performance, ensuring his functional independence (EVELISE et al, 2006). Therefore, autonomy is associated with the decline in the ability to play the Daily Life Activities (DLA) and with the gradual reduction of the muscular functions.

The question of aging is related to the autonomy, that is, the capacity to determine and to execute its proper objectives. Any individual arriving at the eighty years of age capable to manage its proper life and to determine when, where and as the activities of leisure, social conviviality and work will happen, certainly will be considered healthful (WEDGE et al, 2007).

According to Group of Latin American Development for Maturity (GDLAM), formed for researchers (professors and learning) of the Master Course of the Laboratory of Biosciences of the Human Motor Skills of Castello Branco University (LABIMH), with the purpose to study and to define concepts, the autonomy is defined in three aspects: the action autonomy that mentions notion about physical independence; the wish autonomy that mentions self-determination possibility ; and the autonomy of thoughts that makes possible the individual to judge any situation.

In this direction, it can be concluded that autonomy cannot be defined in only one aspect or an only one perspective, but on a context more comprehensive, that considers the individual in all its fullness, according with the Figure 1 (DANTAS; VALLE, 2004).

FIGURE 1 – AUTONOMY SCHEDULE



Fonte: (DANTAS & VALE, 2004).

Being the aging the addition of all the biological, psychological and social changes that occur with passing of the time, some modifications can harm a good quality of life for the aged ones, even because the physiological and functional limitations are directly associated to this group (MATSUDO, 2001).

The decline speed of the physiological functions is exponential, that is, the occurrence of functional losses is acelerated with the increase of the age. Thus for example, in a space of 10 years, occur bigger functional losses between 60 and 70 years old than between 50 and 60 years old. There is, therefore, a cumulative effect of functional changes, with gradual degeneration of the mechanisms that regulate cellular and organic answers front to the external aggressions, leading to the disequilibrium of the organism as a whole (MATSUDO, 2001).

The same author affirms the functional changes that occur with the advance of the age are attributed to several factors, as genetic defects, enviromental factors, emergence of diseases and expression of aging genes, or gerontogenes. Although it is a previsible phase of the life, the aging process isn't genetically programmed, as previously believed, that is, there are variant genes whose expression favors the longevity or reduces the duration of the life.

In this direction, the use of evaluations as of the functional capacity becomes necessary, that has the possibility to supply important information on the profile of the aged one, being used as a simple and useful tool in the identification of the limitations and loss of the autonomy of the aged one. Through the evaluation of the functional capacity strategies of aged health promotion can be defined aiming at to delay or to prevent the incapacities.

This affirmation can be confirmed through of the results obtained by Dantas, et al (2004) in research carried out with the objective to analyze the degree of functional autonomy in aged physically active and inactive, where was concluded that, people who practice a regular physical activity present better physical conditioning and better performance in the activities that require muscular force, mainly of inferior members, impacting directly in its functional autonomy in the Daily Life Activities. It was observed also that the physically active individuals tend to become functionally more independent, having bigger autonomy in the accomplishment of daily activities, and consequently a better life quality, in relation to the individuals that are not practicing

physical activity.

Similar results can be found in the studies carried out by Aragão (2002) and Valley (2004) that had gotten significant answers from the accomplishment of the functional autonomy evaluation after a physical activity program carried on elderly. A program of regular physical exercises can promote more qualitative than quantitative changes,for example, alteration in the fulfillment of the movement, increase in the speed of execution of the task and adoption of security measures to carry out the task.

In this direction, it can be affirmed that the autonomy would be choice freedom, of action and self-control on the life, considering that it is directly related to the capacity of the individual in being dependent or independent in the accomplishment of the Daily Life Activities (DIOGO, 2007). In sight of this, it becomes necessary the implementation of physical activities for the aged people, not only as a form to minimize the effect of the aging, but, especially, as a form of improvement of the individual physical capacities, seeking greater independence and satisfaction in the accomplishment of the daily life activities, through the improvement of the functional autonomy that will aim the permanence of the full exercise of its rights and duties of citizen.

Before of the presented evidences, it appears the interest for the development of activities that promote health through of physical exercise from discussions between professionals/docents of the Primary Attention of the city of Juazeiro do Norte, as the medicine academics of the College of Medicine of Juazeiro do Norte (FMJ) and Physical Education professors of the Federal Center of Technological Education of Ceará (CEFET). The scene for the development of the research was in two units of the Project Health of the Family stations 20 and 44 (PSF-20/44) of the related city, where welfare and docent activities are carry out on a regular way.

So,the objective of this study was correlate the Functional Autonomy Indices (FA) , in the Daily Life Activities (DLA), in hypertensive aged followed for the project "Caminha Juazeiro in the city of Juazeiro do Norte - Ce.

MATERIAL AND METHODS:

STUDY DESIGN

The search for cross-sectional and descriptive sample was characterized as a non-probabilistic intentional, consisting of 24 elderly hypertensive patients (9 men and 15 women) with a mean age of 68.3 +5.65 SD, not all practitioners of exercise . As inclusion criteria, individuals must be registered with the Health Program (FHP), post 22 and 40 of the city of Juazeiro do Norte, the elderly (a) and hypertensive non-practicing physical activity and exclusion criteria to be with any type of acute or chronic illness that would make the deterrent factor for the tests. The research met the ethical standards laid down in Resolution 196 of 10 October 1996, the National Health Council

PROCEDURES

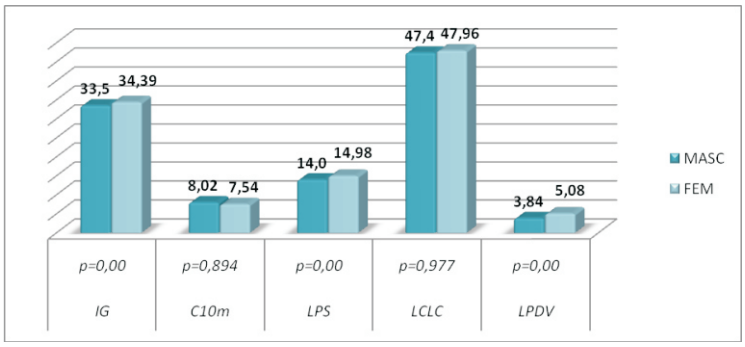
For the assessment of functional autonomy, the patients were submitted to a battery composed of five tests adopted in the protocol of functional assessment of the Group of Latin American Development to Maturity (GDLAM) walk 10m - C10 (SIPILA et al., 1996) , rising from a seated position - LPS (GURALNIK et al., 1994), rising from a prone position - LPDV (Alexander et al., 1997), rising from a chair and moving around the house - LCLC (ANDREOTTI & Okuma, 1999), and the test and get a dress shirt - VTC (Dantas & Vale, 2004). All these tests are used to calculate the index GDLAM (IG).

$$GI = \frac{[(C10M + LPS + + LPDV\ VTC) \times 2] + LCLC}{4}$$

PROCEDURE FOR DATA ANALYSIS

From the collection of raw data and the proposals outlined in the study, we used the statistical packages Statistical Package for Social Sciences (SPSS ®) version 16.0 for Windows ®, to list all the results and formulation of the database. We used descriptive statistics of mean, standard deviation, maximum and minimum inference with a correlation coefficient "r" Pearson, Analysis of variance (ANOVA) two-way, repeated measures, Friedman applied to identify significant differences between pairs of variables , adopting a significance level of 0.05%. The results will be distributed in graphs and tables.

RESULTS:



In the chart above provides values for the general index (GI) and the tests that make up the battery of tests GDLAM. We can observe that the results presented are separated by gender and that for most tests (LPDV, LCLC, LPS), the female stands out as the male. Thus, to test LPDV men had better values, even without showing any significant difference for the genera. Towards the LCLC, again women had worse outcomes than men, and this time it was actually proven a significant difference, seeing that just as the LPDV the less time the better the outcome. This serves to LPS, the females again show worse values than men.

The walking tests of 10 meters the opposite occurs, women perform better for this test with an average of 7.54 sec, while men 8, 02 sec.

We can see that statistically significant difference between genders.

When classified tests from the reference GDLAM, just to test LPDV men were classified as REGULAR, since the rest are in the parameter of low, even for IG.

DISCUSSIONS

Pereira et al. (2003) conducted a study in two charities, the IMAF and CVA. In both homes, the tests of functional autonomy had values similar to ours, considered weak: C10M (13.71 and 29.57); LPDV (6.36 and 10.00) and LPS (18.86 and 20.21), respectively. Another primary interest was also shown by Pereira et al. (2003), in their studies, which show that elderly subjects had been working Extremament higher. This undoubtedly suggests that the elderly residing in the home can be more active than one who is admitted to an institution or a hospital.

In a study by Vale et al. (2006), which uses as a sample aged 22 divided into two different groups, control group (CG) and a group of strength training resistance (GF), in his study can be seen that, after performing the experimental treatment, GF reduced the time appointed for C10M and LPS significantly ($p < 0.05$). In LPDV, the difference was not significant, but decreased the run time and standard deviation, indicating a trend toward homogeneity of the sample and an approximation of the time limit of the test. When compared with GC, GF conducted all tests in less time.

The decrease in the ability of muscles to produce force rapidly may affect adversely the ability of older adults perform activities such as climbing stairs, walking, rising from a chair, or perform routine tasks. Some factors, such as the reduction of muscle mass, changes in the control mechanism of the nervous system, hormonal changes, poor nutrition and, especially, physical inactivity, can significantly contribute to functional decline, causing physical dependence (BERLONI, 2006).

In the study by Berloni et al. (2006), with two groups of elderly women (PHG) and not engaged in water (GNPH), it was noted that a significant difference ($p < 0.05$) between the functional tests of LPS, and LCLC LPDV respectively. Only C10M test showed no significant difference in both groups. Unlike our study demonstrated that the GPH, the functional tests, achieved a rating of "good" or "very good", seeing that in none of our elderly had ratings that level. However, the GNPH counterproductive, achieved in only one of the tests of functional autonomy, the classification level of "good", while the remaining results obtained have achieved ratings at "regular" and "weak", for this group was a closer approximation of our study, seeing that most of the tests found themselves classified between low and regular.

Taaffe (2006), in a review article, refer to sarcopenia and a decline in muscle mass, causing loss of physical performance and functional autonomy and quality of life of the elderly. In this article, the author shows that resistance training or strength training, has been appointed as a physical stimulus, disrupting functional decline and providing substantially a physical function. It sets out to train once or twice a week, reaching the major muscle groups at moderate intensity, is enough to improve the quality of life. Taaffe (2006) also states that physical exercise of any kind can definitely be a way to prevent significant loss of physical and functional capacity caused by the aging process. Thus, one can observe that the results obtained by our study are consistent with the reality that non-active elderly are vulnerable to a decline in the physical - functional.

FINAL CONSIDERATIONS:

Both genders showed to be in level of functional autonomy as low. This may generate significant negative impact on aspects related to health and quality of life, especially because these individuals already have chronic degenerative diseases.

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CORRELATION OF THE FUNCTIONAL AUTONOMY, IN THE DAILY LIFE ACTIVITIES, IN AGED HYPERTENSIVE PEOPLE

SUMMARY

The study had for objective to correlate Functional Autonomy(FA), in aged hypertensive people, from the project “Caminha Juazeiro”, registered in cadastre in two health center from Juazeiro do Norte – CE city. This research elapses of a descriptive, transversal study with 24 individuals (9 men; 15 women), of both genders, with average of age of (68,3+5,65) submitted to the protocol of evaluation of the FA of the group of Latin American development for the maturity, constituted by tests to walk 10 meters (W10M), to raise of the chair and to move themselves for the house (RCMH), to raise from sitting position (RSP) and to raise from the ventral decubitus position(RVDP).Descriptive statistics were used and pre - established point of cut; as

inferencial test of correlation of “spearman” and test “t” of student for independent samples. The results found in the masculine group IG = (33,55+7,57); C10m = (8,02+2,40); LPS = (74+4,46); LCLC= (47,4+7,77); LPDV = (3,84+1,70) and feminine IG= (34,39+8,54); C10M= (7,54+1,62); LPS= (14,98+4,10); LCLC= (47,96+8,68); LPDV= (5,08+4,04). All the analyzed variables was in weak levels. The correlations showed itself strong between the variable age and C10M (r=0,894), gender and LCLC (r=0,977). The test of difference between averages disclosed not to have significant differences (p<0.05) in the variables analyzed in relation to gender. Concluding that both genders be revealed at the level of FA considered weak. This fact can generate significant negative impact on aspects related to health and quality of life, mainly because these individuals already have chronic degenerative diseases.

KEYWORD: functional autonomy, activities of daily life, aged people.

CORRELATION DE L'AUTONOMIE FONCTIONNELLE, DANS LES ACTIVITES DE LA VIE QUOTIDIENNE CHEZ LES PERSONNES AGEES HYPERTENDUES

RÉSUMÉ :

l´étude a eu comme objectil de comparee l´Autonomie Fonctionnelle (AF) chez les personnes âgées hypertendues, du projet "Marche Juazeiro", inscrites dans deux postes de santé de la ville de Juazeiro do Norte-CE-Brazil Cette recherche découle d´une étude descriptive transversale sur 24 individus (9 hommes, 15 femmes), des deux sexes, d´un âge moyen de 68,3+5,65 ans soumis au protocole d´avaliation de l´AF du groupe de développement Latino-américain pour la maturité, constitué des tests de "marcher 10 métres" (M10m), "se lever d´une chaise et se déplacer dais la maison" (LCDM), "se lever de la position assise" (LPA) et se lever de la position décubitus ventrale (LPDV). Il a été utilisé des statistiques descriptives et des seuils pré-établis ; commelertest de corrélation d´inférence de "speaman" et le test "t" dé student pour les échantillons indépendants. Les résultats ont été dans le groupe masculin IG= (33,55+7,57); M10m= (8,02+2,40) ; LPA= (74+4,46) ; LCDM= (47,4+7,77) ; LPDV= (3,84+1,70) et féminin IG= (34,39+8,54) ; M10m= (7,54+1,62) ; LPA= (14,98+4,10) ; LCDM= (47,96+8,68) ; LPDV= (5,08+4,04). Touts les variables analist´es ont été trouvé à des niveaux faibles. Les corrélations se sont montrés fortes entre les variables âges et M10m (r=0,894) ; sexe et LCDM (r=0,977). Le test de différence entre les moyennes a révélé qu´il n´y avait pas pas de différence significatives (p<0,05) dans les variables analisées par rapport au sexe. Naus en concluons que les deux sexes étaient à des niveaux d´AF concidérés faible. Cela pent générer des impacts négatils significatils sur les aspects en relation avec la santé et lá quálité de vie, principalement parce ce que ces individus ont déja présenté des patologies chronico-dégénératives.

MONTS-CLÉS : Autonomie Fonctionnelles, Activitees de la quotidienne, Personnes âges

CORRELACIÓN DE LA AUTONOMÍA FUNCIONAL EM LÃS ATIVIDADES DE LA VIDA DIÁRIA EM IDOSOS HIPERTENSOS

RESUMEN

El estúdio tuvo por objetivo correlacionar la Autonomia Funcional (AF) en idosos hipertensos, del projecto “Caminha Juazeiro”, registrados en dos puestos de salud de la ciudad de Juazeiro do Norte-Ce. Esta pesquisa transcurre de un estudio descriptivo, transversal con 24 individuos (9 hombres, 15 mujeres) con média de edad de (68,3+5,65) sometidos al protocolo de evaluación de la AF del grupo de desarrollo Latino americano para la madurez, compuesto de los testes de caminar 10 metros (C10m), levantarse de la silla y desplazrse por la casa (LSDC), levantarse de la posición sentada (LPS) y levantarse de la posición decúbito vientral (LPDV). Se ha utilizado estatística descriptiva y punto de corte establecidos como inferencial test de correlación de spearman y test “t” de student para muestras independientes. Los resultados encontrados en el grupo masculino G =(33,55+7,57); C10m =(8,02+2,40); LPS =(74+4,46); LCLC=(47,4+7,77); LPDV =(3,84+1,70) e feminino IG=(34,39+8,54); C10M=(7,54+1,62); LPS=(14,98+4,10); LCLC=(47,96+8,68); LPDV=(5,08+4,04). Todas las variables analisadas se han encontrado en niveles débiles. Las correlaciones se han mostrado fuertes entre las variables edades y C10M (r=0,894), género y LCLC (r=0,977). El test de diferencia entre medias ha revelado no haber diferencias significativas (p<0,05) en las variables analisadas en relación al género. Concluyendo que ambos los géneros han revelado estar en nivel de AF considerado débil. Este hecho puede gerar impactos negativamente significativos en los aspectos relacionados a la salud y calidade de vida, principalmente porque estos individuos ya presentan patologias crónico degenerativos.

PALABRA LLAVE: Autonomía Funcional, Actividades de la Vida Diaria, Idosos

CORRELAÇÃO DA AUTONOMIA FUNCIONAL, NAS ATIVIDADES DA VIDA DIÁRIA, EM IDOSOS HIPERTENSOS

RESUMO

O estudo teve por objetivo correlacionar a Autonomia Funcional (AF), em idosos hipertensos, do projeto “Caminha Juazeiro”, cadastrados em dois postos de saúde da cidade de Juazeiro do Norte - CE. Esta pesquisa decorre de um estudo descritivo, transversal com 24 indivíduos (9 homens; 15 mulheres), de ambos os gêneros, com média de idade de (68,3+5,65) submetidos ao protocolo de avaliação da AF do grupo de desenvolvimento Latino-americano para a maturidade, constituído dos testes de caminhar 10 metros (C10M), levantar da cadeira e locomover-se pela casa (LCLC), levantar da posição sentada (LPS) e levantar da posição decúbito ventral (LPDV). Utilizou-se estatística descritiva e ponto de corte pré-estabelecidos; como inferencial teste de correlação de spearman e teste “t” de student para amostras independentes. Os resultados encontrados no grupo masculino IG =(33,55+7,57); C10m =(8,02+2,40); LPS =(74+4,46); LCLC=(47,4+7,77); LPDV =(3,84+1,70) e feminino IG=(34,39+8,54); C10M=(7,54+1,62); LPS=(14,98+4,10); LCLC=(47,96+8,68); LPDV=(5,08+4,04). Todas as variáveis analisadas encontraram-se em níveis fracos. As correlações mostraram-se fortes entre as variáveis idade e C10M (r=0,894), gênero e LCLC (r=0,977). O teste de diferença entre médias revelou não haver diferenças significativas (p<0,05) nas variáveis analisadas em relação ao gênero. Concluindo que ambos os gêneros revelaram estar em nível de AF considerado fraco. Este fato pode gerar impactos negativamente significativos nos aspectos relacionados à saúde e qualidade de vida, principalmente porque estes indivíduos já apresentam patologias crônico-degenerativas.

PALAVRA-CHAVE: autonomia funcional, atividades da vida diária, idosos.

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