

47 - INFLUENCE OF A WALK IN THE ACTIVITIES OF DAILY LIFE OF ELDERLY

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INTRODUCTION

According Kallien and Markku (1995) aging is an inexorable process to living beings that leads to a progressive loss of functional abilities of the body, increasing the risk of a sedentary lifestyle, which in turn has come under pressure from major technological breakthrough occurred in the last decades, which contributes as a risk factor for chronic diseases, especially cardiovascular diseases, the leading cause of death in the elderly (Kalache and Coombes, 1995; PATE, et al, 1995; SHEPHARD and Aoyagi, 2009).

Changes in areas biopsychosocial endanger the quality of life of the elderly, by limiting their ability to perform, with vigor, their daily activities and put in greater vulnerability to your health (STEVENS, et al, 2009). As an example, the proposed revision by Galna et al (2009) show that the greater instability of elderly facing environment with restricted movement.

According Vuori, (1995) and Reelick, et al, (2009) one of the factors that has contributed to minimize the degenerative processes of aging is the natural physical exercise, which in addition to combat sedentary lifestyle can contribute significantly to the maintaining physical fitness of the elderly, whether in his health as part of the functional capabilities. However, one should think that the results are specific and if the exercise program is interrupted triggered by the same advantages are lost (MICHAELIS, et al, 2008).

The aerobic exercise in older adults have been considered as an important component of healthy lifestyle, improving functional capabilities. Recently, this view has been reinforced by new scientific evidence (and SCHAAN Harzheim, 2004; Prohaska, et al, 2009; VANSWEARINGEN, et al, 2009) linking regular aerobic exercise with a number of benefits such as: decrease in the concentration of triglycerides (TG), low density lipoproteins (LDL), total cholesterol (TC) and insulin resistance, which have an inverse relationship with the development of chronic degenerative diseases (Aoyagi and SHEPHARD, 2009; Araújo, 2005).

In other works such as Herbert and Teague (1989), Morris and Salmon (1994); McMurdo and Rennie (1993) results suggest that psychological and social reasons are also important for the accession of seniors in an exercise program and are directly related to: reducing anxiety, depression and social support (family, spouse (a) and health professionals). The knowledge and belief of the benefits that physical activity promotes health and improves, may initially motivate the individual to physical activity (SHARPE and Connell, 1992). However, feelings of well-being and fun seem to be strong reasons for the adherence of individuals in physical activity programs (McMurdo et al 1993). According Robergs and Roberts, 2002 to aerobic exercises can systematically generate benefits for the elderly, especially those related to quality of life.

Based on the benchmarks presented earlier is inconceivable disbelief in the potential of systematic practice of physical activity in the elderly and propositions solid as ACSM, (2009) have been made in recent years to the specificity of training with this type of population, however, the transfer the positive effects of exercise on different body systems for daily activities, yet does not seem to be well defined, in this paper, the problem will be understood as functionality therefore improves the cardiovascular system indicates a potential for more efficient climbing stairs? Or training involving water activities such as water aerobics, enhance the ability of a senior to move into terrestrial environment with efficiency in activities that induce a change in direction? This problem has been investigated since the late 70's (Newell and SHAPIRO, 1976; ADAMS, 1987; WULF and Schmidt, 1988; NEWELL, 1991) the authors describe in short limitations on the effects of the transfer of a motor skill for another skill. However, these studies are strong indications point to the effect of the transfer motor be real when two variables are controlled: the first one concerns the variability of practice in the acquisition of motor skills, thus programs that propose changes in skill execution as the floor will be more likely to favor the transfer of these acquisitions to real-world situations, which initially would be limited if the program was restricted to practice only walk eg treadmill, the second variable is the ability to be transferred like new skill, especially regarding the components and synchronization between them.

Currently there appears to be a strong consensus on the transfer of training effects capabilities like strength or resistance to real-world tasks in elderly (Faber et al, 2006; Gardner et al, 2000; Shumway-Cook, et al, 1997), therefore, propose that further investigations in this area become necessary to further clarify the topic under

OBJECTIVE

To evaluate the influence of a walking program on activities of daily living of elderly (ADLs).

MATERIALS AND METHODS

We conducted a pilot study with 20 female students with a mean age of 61 years living in the city of Santos, who underwent training walk of 60 minutes divided into 15 minute warm up, 40 minute workout focused directly on the walk with different intensities measured by the scale exertion (Wilder and Brennan, 1993) and variations in terrain like sidewalks, lawns, sand and water also were used materials such as chairs, leggings and wedges 2 kg in 5 minutes remaining were performed relaxations. Training took place three times a week and we used the tests proposed by ADL Andreoti and Okuma, 1999 and 6-minute walk and Riklir proposed by Jones (1998), but this experiment lasted for 2 weeks due to some output volunteers, by the difficulty of getting to the training site, thereby precluding the continuation of this project.

Based on the difficulties presented above, an experiment was conducted with institutionalized elderly walk, containing 27 elderly of both genders with a mean age of 71 years, all residents in the institution sedentary and St. Vincent de Paul in the city of Santos, which conducted trainings walk 4 times a week for a period of 2 months. The classes lasted 60 minutes, divided into 15 minutes of heating, using walking past with different amplitudes and low intensities, dynamic stretches and group dynamics games as cooperation and self-overcoming focusing enhance group interaction 40 minutes walk training with different intensities, measured with the scale of effort Wilder and Brennan (1993) which classifies the effort in 5 different levels: 1 = very

slight, 2 = mild, 3 = moderate, 4 = strong, 5 = strong and 5 minutes of stretching and relaxation. For the motivation of the elderly during training strategies were used for self-improvement, for example, walking a certain distance and mark the time for the next series trying to maintain or decrease the time realized initially. The training was held at St. Vincent de Paul institution and was just kind of used asphalt lot, unlike the pilot study, due to the rules of the institution does not allow the output of the elderly, for security reasons.

For the evaluations was established a partnership with the Laboratory of Physical Evaluation and Performance Motor (LAFPM) located in the Faculty of Physical Education of Saints - FEFIS - UNIMES where an evaluator attended the institution every 2 weeks to perform the tests, evaluations applied to the physical capabilities were the ADL (Andreoti and Okuma, 1999) consisting of tests: sit and lift chair for 1 minute in order to perform this action as many times up and down 15 steps, where the goal for both is to perform the action in the shortest time possible and also put on socks for the shortest time possible further testing was performed for physical fitness, 6-minute walk, where the individual has to make the biggest possible footage.

The materials used were: a) watch brand addidas track time for training, intervals and series b) computer brand ACCER for tabulating the data in evaluations; c) measuring tape to measure the training place, d) SPSS to obtain the results.

RESULTS

Analyzing the tables below, we can see that the elderly group obtained statistically significant difference evaluated for pre-and post-training for all variables.

Table 1. Description of means and standard deviations of tests ADL in elderly

	SU 15 Pre	SU 15 Post	SD 15 Pre	SD 15 Post	PS Pre	PS Post
Average	58,7	53,74*	59,85	52,63*	43,11	38,30*
SD	16,21	14,65	12,04	11,14	8,31	7,56

* Indicates statistically significant difference between pre and post for P=0,05. SD = Standard Deviation, SU 15 = Step 15 up, SD 15= Steps 15 Down, PS= Put on socks.

Table 2. Description of means and standard deviations of tests ADL in elderly

	SS Pre	SS Post	WT Pre	WT Post
Average	17,48	24,70*	267,41	290,37*
SD	6,99	6,29	46,21	48,57

* Indicates statistically significant difference between pre and post for P=0,05. SD = Standard Deviation, SS= Sit and stand up in 1 Minute, WT= Walk test 6 Minutes.

DISCUSSION

Based on the propositions made by (Newell and Shapiro, 1976; Adams, 1987; Wulf and Schmidt, 1988; Newell, 1991), was designed a walking program that had in essence the variability of walking ability for greater skill acquisition sequential where the walking was one of the basic components. The results of this work make it possible to observe that the elderly who underwent training walk improved significantly in all variables, comparing pre and post training, showing that for this group training walk in was efficient for the improvement in ADL, confirming the findings of the scientific literature (Hernandes and Barros, 2004; Rabelo et al, 2004; Passos et al, 2008; Simões et al, 2010).

CONCLUSION

The program showed efficient on transfer training abilities to the conditions which involving physical abilities as presented in this study group, which achieved statistically significant results in increased physical abilities related to ADL, which are climbing 15 steps, 15 steps down, dress socks, chair stand's test in a minute, and the six minute's test.

New studies comparing variety practice programs and not varieties must be stimulated in order to get possible more roust discussions about magnitude transferences between programs with distinct designs.

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INFLUENCE OF A WALK IN THE ACTIVITIES OF DAILY LIFE OF ELDERLY ABSTRACT

When discussing the interaction between physical activity and aging, two factors appear to currently be in the spotlight, they are the specificity and functionality. The specificity is related to the development of programs that meet the specific characteristics of a given population, and leverage significant adjustments to the different organ systems in health enhancement. Already functionality can be observed by the transfer of the positive effects arising from the exercise to the daily tasks of practitioners. The aim of this study was to evaluate the effects of a specific program of walking in elderly influence the activities of daily living. The program lasted 2 months with 4 sessions of practice per week and 60 minutes each. As measures were used to test and 6-minute walk test battery of ADL. The program was effective for all variables.

KEYWORDS: ADL; Seniors; Training

INFLUENCE D'UNE PROMENADE DANS LES ACTIVITÉS DE LA VIE QUOTIDIENNE DES PERSONNES ÂGÉES RÉSUMÉ

Lors de l'examen de l'interaction entre l'activité physique et le vieillissement, deux facteurs semblent être actuellement sous les projecteurs, ils sont la spécificité et la fonctionnalité. La spécificité est liée à l'élaboration de programmes qui répondent aux caractéristiques spécifiques d'une population donnée, et les ajustements de leviers importants pour les différents systèmes d'organes dans l'amélioration de la santé. Déjà fonctionnalité peut être observé par le transfert des effets positifs découlant de l'exercice des tâches quotidiennes des praticiens. Le but de cette étude était d'évaluer les effets d'un programme spécifique de marche de l'influence des personnes âgées aux activités de la vie quotidienne. Le programme a duré 2 mois avec 4 séances de pratique par semaine et 60 minutes chacune. Que des mesures ont été utilisés pour tester et à 6 minutes à pied de la batterie de tests ADL. Le programme a été efficace pour toutes les variables.

MOTS-CLÉS: ADL; Aînés; Formation

INFLUENCIA DE UN PASEO POR LAS ACTIVIDADES DE LA VIDA DIARIA DE LAS PERSONAS MAYORES RESUMEN

Cuando se habla de la interacción entre la actividad física y el envejecimiento, dos factores parecen ser actualmente el centro de atención, son la especificidad y funcionalidad. La especificidad se relaciona con el desarrollo de programas que cumplen las características específicas de una población dada, y los ajustes de apalancamiento significativas a los diferentes sistemas de órganos en la mejora de la salud. Ya funcionalidad puede ser observada por el traslado de los efectos positivos

derivados del ejercicio de las tareas diarias de los profesionales. El objetivo de este estudio fue evaluar los efectos de un programa específico de caminar en ancianos influencia de las actividades de la vida diaria. El programa duró 2 meses con 4 sesiones de práctica por semana y 60 minutos cada uno. Como medidas se utilizaron para la prueba de 6 minutos y la batería prueba de la marcha de las actividades cotidianas. El programa fue eficaz para todas las variables.

PALABRAS CLAVE: ADL, Seniors, formación

INFLUÊNCIA DE UM PROGRAMA DE CAMINHADA NAS ATIVIDADES DA VIDA DIÁRIA DE IDOSOS

RESUMO

Quando se discute a interação entre atividade física e envelhecimento, dois fatores atualmente parecem estar no centro das atenções, são eles a especificidade e a funcionalidade. A especificidade está relacionada à elaboração de programas que atendam a características específicas de uma determinada população, e que potencializem ajustes significativos aos diferentes sistemas orgânicos na potencialização da saúde. Já a funcionalidade pode ser observada pela transferência dos efeitos positivos advindos do exercício, para as tarefas cotidianas dos praticantes. O objetivo deste estudo foi avaliar os efeitos de um programa específico de caminhada em idosos na influência das atividades da vida diária. O programa teve a duração de 2 meses com 4 sessões de práticas por semana e 60 minutos de duração cada uma. Como medidas foram utilizados o teste de 6 minutos de caminhada e a bateria de testes de AVDS. O programa mostrou-se eficiente para todas as variáveis analisadas.

PALAVRAS-CHAVE: AVDS; Idosos; Treinamento