119 - EFFECTS OF PHYSICAL EXERCISE ON THE FUNCTIONAL AUTONOMY OF ELDERLY

DIEGO CAMPEÃO ROMERO DE ANDRADE;
LEONARDO AFONSO SOUZA DE JESUS;
FELIPE DA SILVA TRIANI
UNIVERSIDADE DO GRANDE RIO – UNIGRANRIO, DUQUE DE CAXIAS, RJ - BRASIL
felipetriani@gmail.com
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INTRODUCTION

The aging process is characterized by progressive loss of function in all aspects of life. In old age, the concept of interdependence is secondary in relation to the concepts of dependency and loss of autonomy. In this phase, the social response to biological decline, absence from work, the change of social identity, social devaluation of the elderly and the vagueness of a relevant social context are examples of facts that imply conditions of stress in the lives of the elderly, making it difficult the achievement of developmental tasks (SILVA; GUNTHER, 2000).

Physiological, psychological and social actions are key points to create a positive context for along with physical activities foster the improvement and focus on improving the quality of life of the elderly. The elderly population in Brazil, considered by Law Nº. 8.842 / 94 (National Policy for the Elderly) as those individuals aged 60 and more, today makes up the fastest growing population segment in proportional terms, bringing more relevance to studies directed at this audience.

A study of Silvestre and colleagues (1996) have denounced the passage of a high fertility and mortality for a Brazilian low fertility and mortality proportionally smaller, something that since then has resulted in the progressive increase in the number of elderly in Brazil. In this scenario, attention should be paid to disorders caused by progressive loss of functional autonomy of the public, because, according to Aragão, Dantas and Dantas (2002) this loss cause effects such as unbalanced and poor motor skills.

Although the process of aging is a natural cycle, some habits can further speed substantially interfere that such events are established. In this context, one can say with Ramos (2003) that the pattern of physical activity undertaken throughout life is closely related to the preservation of functional autonomy of elderly individuals.

Given the above, the question is: is aging as natural and inevitable process influences the functional capacity of elderly individuals and the speed with which this process occurs is related to physical activity levels throughout life, such as exercise can influence functional capacity of the individual while elderly? In this perspective, the objective of this research was to investigate what are the benefits of exercise on the functional capacity of elderly individuals.

METHODOLOGY

This research adopted the Dimensions Novikoff (2010) for construction of scientific writing, this proposed research is divided into five dialectical dimensions, the first Epistemological, which are presented: object, questioning and goal, the second theoretical framework that adds the theoretical, the third technique which discusses the methodology used, then the morphological features that the previous results and finally concluding that the analytic results with those articulates the theoretical framework and presents conclusions of the research.

From this perspective, to achieve the goal of a qualitative research study of bibliographical whose main characteristic lifting bibliographic data of books and scholarly articles, or results of scientific research already conducted and published (NOVIKOFF, 2010) was conducted. We used data from books and articles to elaborate the theoretical dimension of the research and formulation of the morphological dimension in this sense.

All articles were analyzed using analysis table of scientific text proposed by Novikoff (2010). The criterion for inclusion of data from the articles in this study was that the text perform discussion about the exercise and the elderly, so the items found did not discuss the items of the inclusion criteria were excluded from the study. Thus the data found for the morphological dimension were presented in an illustrative analytic to assist in understanding the results.

THE ELDERLY AND PHYSICAL EXERCISE

Currently a very present studies gerontology (the science that studies the aging process), but rarely addressed by demographers question, because sneaks a bit of their area of expertise, is the quality of life and survival of elderly people in terms of health. In this sense, regardless of age it is important to always seek to improve quality of life, seeking health through a state of physical, mental, psychological and spiritual well-being (WHO, 2005).

In this context, health in aging is essential, although Nieman (1999) states that approximately 85% of older people have one or more diseases resulting from the aging process, regardless of lifestyle. However, it also states that exercise, diet and smoking, have positive and / or negative on improving the quality of life effects. The exercises are effective in older people since the practice is common and combined with a special attention to diet, for physical losses occur with the aging process. According to Nahas (2001) there are a number of physical aging process with loss, in which neurons lose 50,000 brain cells, decrease in lung elasticity for natural fibrosis, muscles lose 25% of power after 65 years, the heart valves tend to stiffen, metabolism after 35 becomes slower due to change of glands etc.

When it comes to exercise, the same author (NAHAS, 2001) presents a number of benefits that it can promote, including physiological (glucose control, quality of sleep, improvements in physical capacity related to health), psychological (relaxation, reduced levels of anxiety and stress, improved mood and cognitive improvement) and social (more secure individuals, increases social and cultural integration, community involvement, social network and expanded cultural, among others), plus the reduction or prevention of some diseases such as osteoporosis and postural deviations.

In this scenario, it is possible to realize the value of exercise and assert with Cleto (2002) there are several ways of getting older, and there may be a harmonious aging where the individual ages with quality of life and can happen in a disastrous way in which the joy of living is lost in the course of its history. For these losses arise more slowly you can get great results with physical exercise.

The contribution of physical activity to health are associated with reducing the level of risk to which the individual is subjected during life, being necessary some recommendations in order to improve fitness and develop favorable attitudes (PIERON, 2004). Among many, one can find recommendations and exercises with the objective of preserving or enhancing the autonomy, minimizing and / or slowing the effects caused by the aging process, and increase the quality of life by promoting social interaction while maintaining the mobility and autonomy (SHERPHARD, 2003).

The recommendations for exercise programs for seniors say the ideal is a gradual process, respecting the limits of the

individual, because old age is marked by a series of physical and psychological limitations that must be considered before beginning an exercise program . Physical assessments are essential to be able to prescribe exercise safely, because many elderly have diseases like hypertension, diabetes, osteoporosis, cardiovascular disease and joint problems, so these are some of the most common among this population. Among the most recommended exercises for seniors, Santos and Pereira (2006) propose activities like aerobics, gymnastics, weight lifting and walking, because it realized through research that the regular practice of these exercises can help in reducing sarcopenia, increasing the quality of gait and reducing the risk of falls, since Nahas (2001) corroborates the walk and also suggests dancing, as he said this activity is well appreciated by seniors and has the effect of developing cardiovascular system, the authors also suggest that older people choose the activities that have more adaptation.

Much of the epidemiological evidence supports a positive effect of an active lifestyle and / or individuals engaging in exercise programs to prevent and minimize the deleterious effects of aging. Scientists increasingly emphasize the need for physical activity is a key part of the global programs of health promotion. You can not think today about "preventing" or minimize the effects of aging without, beyond general measures of health, exercise is included (MATSUDO, MATSUDO, BARROS NETO, 2000).

FUNCTIONAL AUTONOMY

Authors and Fillenbaum (1984) define physical functionality as a condition of autonomy necessary to perform frequent tasks and practices of all individuals, so these activities can be understood as the personal care, safety and ability to live alone at home. Fields (1982) functionality is understood as the predominant dimension of identifying the situation of loss of autonomy of the elderly. Given these understandings, Fillenbaum (1984) describes that every individual should have their functional capacity in good condition, because according to him, she is the one who ensures the physical and mental health as well as determines the social welfare.

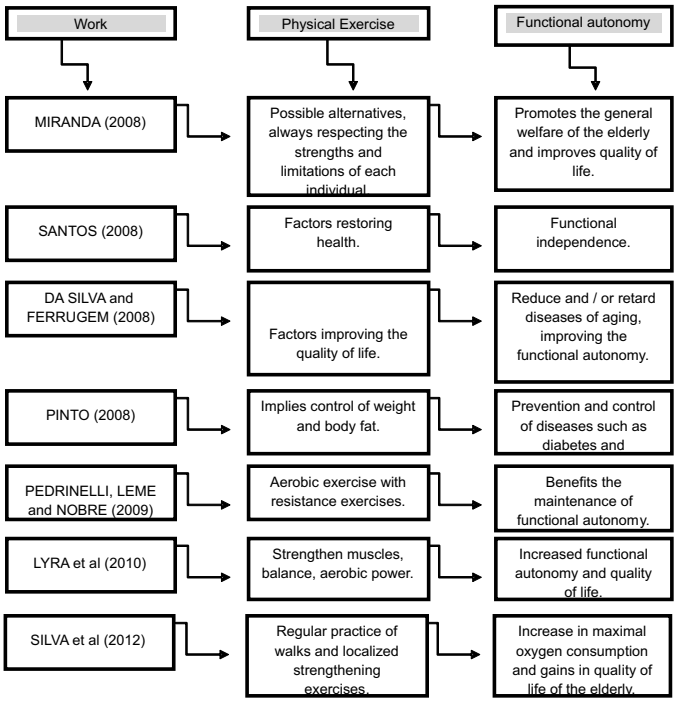
In this sense, it becomes essential that applied to the old assessment, because then it is possible to identify clinical history, physical degree of autonomy, ability to perform activities of daily living, leisure activities, level of cognitive deterioration and the social and family dynamics (SOUSA, UGLY, 1998), as well as social support, economic status, ability to care (FILLENBAUM, 1984), beyond the state in which they are anthropometric, nutritional conditions (LACHS et al, 1990; SIU; REUBEN; MOORE, 1994) and level of social interaction (LAWTON et al, 1982).

There is evidence that factors such as disease prevention, establish positive social relationships, maintaining high sense of humor, and be autonomous physically influence in promoting the general welfare of the elderly and therefore the quality of life (VIEIRA, 1996). In this sense, the practice of physical exercise may imply significant in the case of the aforementioned factors gains because it can be practiced with the goal of ensuring the general well-being and quality of life (NAHAS, 2001).

RESULTS AND DISCUSSION

To better understand the value of exercise for seniors, we present below an illustrative description of the different effects of exercise to optimize the functional autonomy.

Illustrative I: Indication of the influence of exercise on functional autonomy from the work



During the research and analyzing the results it was noted that quality of life is an emerging factor from the theoretical framework to the discussion of the study, so it is fairly reasonable and perfectly justifiable to present, among much, the concept greater scholarly consensus is that proposed by the World Health Organization (WHO, 2005) which describes how the individual's perception of their position in life in relation to the culture in which it operates, as well as systems of values which they live and their relationship with the objectives, expectations, standards and concerns. However, it is a concept and complex physical, psychological, level of addiction, social relationships, beliefs and relationship with the environment.

From this definition, one sees that the term quality of life encompasses a broader concept of well-being, which results in the individual's own judgment. It is a dependent on historical patterns, cultural, social and even individual subjective concept. Assessing the quality of life of a particular individual varies depending on the three dimensions, in which the subject is inserted:

physical, psychological, social and emotional.

In the survey ten articles were analyzed, and only eight describe the influence of physical exercise on functional autonomy, the same are shown in the illustrative I. In this sense, there was the existence of several bouts that can be developed during the process aging, they are physiological, psychological and social. It has been proven that with physical exercise these affections can be reduced and its onset delayed, thus ensuring a healthier and better quality of life aging (NAHAS, 2001).

In an attempt to provoke a discussion from the statements found in searches of Nahas (2001) and contribute to the understanding of the effects of exercise on the functional independence of older people, a table showing the benefits of exercise on the functional autonomy was performed in different authors , so the effects are adduced in illustration I that promotes well-being and optimizes the quality of life (MIRANDA, 2008; LYRA et al, 2010; SILVA et al, 2012), independence / functional autonomy (SANTOS, 2008; DA SILVA, RUST, 2008; PEDRINELLI; RUDDER; NOBLE, 2009; LYRA et al, 2010), slows the aging diseases (DA SILVA, RUST, (2008), prevents diseases like diabetes and hypertension (PINTO, 2008) and also promotes an increase in maximal oxygen consumption (SILVA et al, 2012).

FINAL CONSIDERATIONS

The research contributed to the understanding, different from previous studies how the aging process can be characterized by the progressive loss of body functions such as balance loss and emergence of the chronic lifelong disease occurs.

Before the affections caused by aging exercise shows himself able to positively influence the functional independence of older people by reducing and slowing of bodily losses, increased quality of life, promote wellness, and delay minimization diseases of aging such as diabetes and hypertension and increased maximal oxygen consumption.

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Rua Itamaracá, 420, Duque de Caxias, RJ, Brasil
CEP: 25070-200

EFFECTS OF PHYSICAL EXERCISE ON THE FUNCTIONAL AUTONOMY OF ELDERLYI

ABSTRACT

The aging process is natural and irreversible, bringing diseases of aging and bodily losses. However, it is possible to prove that exercise can be an excellent choice to reduce the causes of this process and to age with more health. In this sense, the objective of this research was to survey existing research in order to understand what the effects caused by exercise that contribute to the functional autonomy of the elderly. The methodology used to develop the research was qualitative type of literature, from a survey of journal articles and academic books. The results were that exercise promotes well-being and optimizes the quality of life, independence / functional autonomy, slows the diseases of aging, prevents diseases like diabetes and hypertension, and also promotes the increase in maximal oxygen consumption. Given the results, the final considerations of this research are that the exercise by causing positive effects on the practitioner, helping to optimize the functional independence of older people.

KEYWORDS: Physical Exercise; Functional Autonomy; Elderly.

EFFETS DE L'EXERCICE PHYSIQUE SUR L'AUTONOMIE FONCTIONNELLE DE PERSONNES ÂGÉES

RÉSUMÉ

Le processus de vieillissement est naturel et irréversible, apportant maladies du vieillissement et les pertes corporelles. Cependant, il est possible de prouver que l'exercice peut être un excellent choix pour réduire les causes de ce processus et à vieillir avec plus de santé. En ce sens, l'objectif de cette recherche était d'étudier la recherche existante afin de comprendre quels sont les effets causés par l'exercice qui contribuent à l'autonomie fonctionnelle des personnes âgées. La méthodologie utilisée pour développer la recherche était de type qualitative de la littérature, d'une enquête sur des articles de journaux et de livres scolaires. Les résultats ont montré que l'exercice favorise le bien-être et optimise la qualité de vie, l'indépendance / autonomie fonctionnelle, ralentit les maladies du vieillissement, prévient les maladies comme le diabète et l'hypertension, et favorise également l'augmentation de la consommation maximale d'oxygène. Compte tenu des résultats, les considérations finales de cette recherche sont que l'exercice en provoquant des effets positifs sur le praticien, en aidant à optimiser l'autonomie fonctionnelle des personnes âgées.

MOTS-CLÉS: l'exercice Physique; L'autonomie Fonctionnelle; Personnes Âgées.

LOS EFECTOS DEL EJERCICIO FÍSICO EN LA AUTONOMÍA FUNCIONAL DE LAS PERSONAS MAYORES

RESUMEN

El proceso de envejecimiento natural y es irreversible, con lo que las enfermedades del envejecimiento y las pérdidas corporales. Sin embargo, es posible demostrar que el ejercicio puede ser una excelente opción para reducir las causas de este proceso y para envejecer con más salud. En este sentido, el objetivo de esta investigación fue estudiar la investigación existente con el fin de entender lo que los efectos causados por el ejercicio que contribuye a la autonomía funcional de los ancianos. La metodología utilizada para el desarrollo de la investigación fue de tipo cualitativa de la literatura, a partir de una encuesta de artículos de revistas y libros académicos. Los resultados fueron que el ejercicio promueve el bienestar y optimiza la calidad de vida, independencia / autonomía funcional, disminuye las enfermedades del envejecimiento, previene enfermedades como la diabetes y la hipertensión, y también promueve el aumento en el consumo máximo de oxígeno. Dados los resultados, las consideraciones finales de esta investigación son que el ejercicio por causar efectos positivos sobre el practicante, ayudando a optimizar la independencia funcional de las personas mayores.

PALABRAS CLAVE: Ejercicio Físico; La Autonomía Funcional; Ancianos.

OS EFEITOS DO EXERCÍCIO FÍSICO SOBRE A AUTONOMIA FUNCIONAL DO IDOSO

RESUMO

O processo de envelhecimento é natural e irreversível, trazendo consigo doenças do envelhecimento e perdas corporais. Contudo, é possível comprovar que o exercício físico pode ser uma excelente escolha para reduzir as causas desse processo e envelhecer com mais saúde. Neste sentido, o objetivo desta pesquisa foi realizar um levantamento de pesquisas já existentes, a fim de compreender quais os efeitos provocados pelo exercício físico que contribuem para a autonomia funcional do indivíduo idoso. A metodologia utilizada para o desenvolvimento da pesquisa foi qualitativa do tipo bibliográfica, a partir do levantamentos de artigos científicos e livros acadêmicos. Os resultados obtidos foi de que o exercício promove o bem-estar e otimiza a qualidade de vida, a independência/ autonomia funcional, retarda as doenças do envelhecimento, previne doenças como diabetes e hipertensão e ainda promove o aumento no consumo máximo de oxigênio. Diante dos resultados, as considerações finais da presente pesquisa são de que o exercício físico por provocar efeitos positivos sobre o praticante, contribuindo na otimização da autonomia funcional do idoso.

PALAVRAS-CHAVE: Exercícios Físicos; Autonomia Funcional; Idoso.