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PHYSICAL ACTIVITY OF ELDERLY PEOPLE

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Abstract

Introduction: Ageing process is recognized as one of the most important aspects of XXI century. Most often it is considered from economical and social perspective however this dissertation's goal is to determine the effect of physical activity on the quality of life of elderly people, because age appropriate physical activity is the best way to stay healthy.

Research goal: Goal of this dissertation is a review of literature about physical activity on of elderly people .

Conclusion: Physical activity has a very significant effect on increasing the quality of life of elderly people .

Key words: physical activity, elderly people, gerontology.

Introduction

Aging, by many is considered as the most important process of XXI century, due to economical, administration and social point of view. It runs inevitably, in a complex way, includes many areas. This is a destructive process caused by physical and mental involution. World Health Organization often defines old age, not by years, but by “new roles, loss of previous roles, or inability to make active contributions to society”. However, it is assumed that the elderly begin after 60 years old. We can divide it to “young old” after crossing 60, middle-old age between 75 and 89, and longevity considered to be exceeded 90 years of age [1-5].

The aging process can be:

successful (successful aging) - defined as old age in full health and vitality. The elderly are involved in social life, take part in entertainment and conduct a satisfying sex life.

ordinary (age aging) - there are perceived deficiencies, limitations, although no excessive irregularities are noticed

pathological (impaired ageing) - associated with many diseases at the same time, noticeable deficits and prolonged rehabilitation [6-7].

It should be emphasized that improving the availability of medical care, improving working conditions, living conditions and socio-economic changes contribute to the extension of human life, however the aging process and old age itself is the least studied and recognized stage of individual development [8-10].

Due to the fact that the number of older people is growing (in Poland the percentage of older people is now 13.5%, and will increase by 2060 to 34.5%), every effort should be made to ensure an adequate level of quality of life. The quality of life of older people is a complex issue, it includes both psychological and physical well-being as well as a sense of fulfillment or happiness. This is certainly a subjective phenomenon, but one can assume a negative impact on the psyche in people with deteriorating physical fitness or motor skills. In a civilized world, a new retirement lifestyle has emerged, older people want to be intellectually and physically fit as long as possible, live a social life and expand their interests. However, a new trend in the approach to old age has begun to appear in the world - elderly people are no longer seen as infirm, dependent or unable to function. The activation of this age group is visible, among others through active participation in physical activities [11- 23].

Changes in the body of the elderly

Negative changes occur in the muscular system of the elderly - muscle mass and strength are reduced, the posture, gait cycle changes, the risk of falls increases. Weakness is also caused by the increase of intramuscular fat, decrease of muscle mass, decrease of tissue density, decrease of collagen fibers. These changes are more frequently observed in the lower extremities than in the upper limbs. These processes reduce the range of motion and reduce central stabilization [24].

Muscle weakness negatively affects the mechanical stimulation of the bone, and thus impairs the trophics. In addition, after 45 years of life, the balance of bone tissue remodeling

decreases, which leads to osteopenia. A growing group of men is beginning to focus on osteoporosis - so far associated mainly with the female sex during menopause. In the case of osteoporosis, the bone tissue weakens, which may result in increased brittleness (due to bone stenosis). Studies show that 80% of patients aged 60-80 years admitted to orthopedic wards, are patients after fractures, which occurred at home and they are diagnosed as osteoporotic fractures. Prevention of osteoporosis should start at an early age, it is very important to properly nourish, provide vitamins (D, C, B6, A and zinc and magnesium) and a large dose of movement. In older age, an appropriate axial bone load is extremely important, which can be achieved, for example, by practicing moderate physical activity (eg walking, running, Nordic walking or aerobics) [25-29].

With age, the risk of osteoarthritis increases, which is the reason of the pain and limitation of physical activity in the elderly. The degenerative disease consists of the whole spectrum of diseases. The disease process affects the whole joint (joint cartilage, but also ligaments, subchondral, joint capsule, synovium and muscles) and has a negative effect on biomechanics [30-34].

In the nervous system, it is noticed that the conduction in the peripheral nerves slows down, and the number of motor neurons decreases. It causes the elapse of simple and alternative reaction time to a given stimulus in the elderly, and also affects the speed, agility and flexibility of movements [35-37].

Physical activity

The research clearly indicates that older people should engage in physical activity, as exercises have a beneficial effect on the quality of life. A correlation between sporting and improving health can be noticed. Properly selected physical activity helps to prevent the occurrence of diseases, reduce the risk of complications after the disease, prevents movement restrictions and prevents pain. Sport allows to extend life expectancy, and also reduces mortality. It is also invaluable in maintaining social contacts. The main purpose of exercises at older age is to improve well-being, a sense of belonging to society, improve balance, improve proprioception and maintain a correct figure. Older people are dedicated to various types of physical activities depending on their needs and requirements. Regularity and commitment are the most important here. The best effects can be achieved by the beginning of practicing

physical activity at a younger age, even before the occurrence of degenerative changes and involutory processes [12,16,21,38-48].

Older people often feel fear of engaging in physical activity because they are afraid of falling fractures, since later on injuries and wounds heal more slowly. Older people also prefer to avoid situations that may exacerbate the pain resulting from degenerative changes. In older age, correct axial bone loads are important. They can be obtained, and thus improve the trophies, by practicing moderate physical activity such as walking, running, Nordic walking or aerobics. The elderly should also take care of equivalent and coordination exercises, as well as exercises to improve the functioning of the cardiovascular and nervous systems [47 , 49-55].

Physical activity of the elderly should be selected individually, involve different muscle parts, move from easier to more difficult exercises, and include various forms of exercise: strengthening, flexing, stretching, exercise, relaxation, aerobic exercises. The most frequently chosen physical activities by seniors are walking, cycling and general exercise exercises at home / morning gymnastics [16,56].

Conclusion

Physical activity has a very significant effect on increasing the quality of life of elderly people.

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