

Міністерство освіти і науки України
Національний університет
«Полтавська політехніка імені Юрія Кондратюка»
Національний університет фізичного виховання і спорту України
Львівський державний університет фізичної культури імені Івана Боберського
ДВНЗ «Прикарпатський національний університет імені Василя Стефаника»
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Львівський національний університет імені Івана Франка
Українська медична стоматологічна академія
Харківська гуманітарно-педагогічна академія
Гомельський державний університет імені Ф. Скоріни (Білорусь)
Lithuanian Sports University (Lithuania)
Nicolaus Copernicus University (Poland)
University of Strasbourg (France)

АКТУАЛЬНІ ПРОБЛЕМИ ФІЗИЧНОЇ КУЛЬТУРИ, СПОРТУ ТА ФІЗИЧНОГО ВИХОВАННЯ

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Таким чином, забезпечення якісної вищої освіти, є однією з головних завдань сьогодення, оскільки вища школа є головуючим елементом усієї системи освіти, тому що саме вона визначає головну соціальну функцію підготовки людини як професіонала вищої кваліфікації і як представника вищої інтелектуальної думки суспільства.

Досліджуючи дану проблему підготовки майбутніх фахівців, ми приходимо до висновку, що формування професійно-педагогічних умінь і навичок, які є відносно самостійним компонентом в загальній структурі педагогічної діяльності, складають найважливішу частину кваліфікаційної характеристики тренера-викладача, а їх формування – основну частину системи професійно-педагогічної підготовки.

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V. Horoshko, Candidate of Medical Sciences
National University «Yuri Kondratyuk Poltava Polytechnic»

THEORETICAL ASPECTS OF THE IMPACT OF NORDIC WALKING ON THE PHYSICAL STATE OF THE BODY AMONG THE ELDERLY IN THE PROCESS OF REHABILITATION

The life expectancy of the world's population continues to increase, there is growing interest in maintaining and increasing physical activity and function in older people. Physical activity programs are implemented to promote the health of the elderly, such as interventions with aerobic exercise, resistance exercise and flexibility. Therefore, it seems important to know how effective physical activity interventions are.

Nordic walking (NW) is a relatively new method of gait training performed using ergonomic poles. The main purpose of using the sticks is to engage the muscles of the upper limbs to create supportive reaction forces, which results in increased energy expenditure (1). Thus, NW is considered to be the recommended physical activity for the elderly people. There is a growing body of research reported on improving fitness, functional fitness, balance, strength, walking speed, and quality of life after NW training among untrained elderly people.

The aim of this study is to define Nordic walking as an alternative sport for the elderly with musculoskeletal injuries and chronic cardiovascular diseases. Nordic walking, also known as pole walking or nordic pole walking, is a form of exercise or sport in which you use poles similar to ski poles to make walking, jogging or running more efficient. The primacy of describing pole walking as a separate sport is disputed by Mauri Rapo and Marko Cantaneva, and in the late 1990s, pole walking developed into an independent sport.

Nordic walking requires the correct size of poles and typical outdoor training clothes such as high quality running shoes and clothing suitable for the weather conditions.

The poles used in Nordic walking are usually made from composites such as glass or carbon fiber. The idea behind poles is to provide extra power for each stride through the muscles of the upper body.

Usually the arms, chest, and large muscles in the upper back are hardly used when walking. Of course, they maintain a balance, but nothing more. When people use sticks in their hands to add power with each step, in fact, all the large muscles in their upper body are activated. The main driving forces are the large back muscles such as the latissimus dorsi and the triceps of the arms, but the movement also involves the biceps, pecs, and core muscles.

Benefits of Nordic pole walking:

The benefits of Nordic walking over normal walking have been proven in numerous studies. One of the main benefits of pole vault walking is that it relieves some of the stress on the joints in the legs. This means that it is a great option, for example, for overweight people or people with knee problems.

Nordic walking has been shown to improve both bone density and muscle strength, as well as signs of sarcopenia or age-related muscle loss. This means that Nordic walking is ideal for the prevention and treatment of osteoporosis, especially when combined with strength training.

Overall muscle activation in Nordic walking is much higher than in normal walking. Nordic walking requires the person to make turns and arm movements. It also requires more active involvement of the major muscles, activating most of the muscles in the body.

Since most of the muscle mass is used, movement is much more efficient than just using the legs while walking. The extra power of the hand movements allows you to maintain a faster pace without even noticing it. The combination of using more active muscle mass and a faster pace will lead to significant improvements in aerobic capacity and endurance. The poles also provide excellent stability in rough or slippery terrain as there will always be at least two points of balance instead of one (per leg). This allows older people with balance and stability problems to move more efficiently and freely. On rough terrain, such as walking on a trail, poles can be used for added stability when negotiating obstacles (3, 4).

Nordic walking being rich in bodily activities, it is beneficial for circulation and heart health. Sport has been shown to be beneficial for neck and shoulder pain, which affects many people who sit a lot. This is because

activating muscles and improving blood circulation reduce tension in the muscles of the upper body and neck. In European countries, Nordic walking is one of the most recommended physical activities by family physicians for regulating weight, improving heart and circulatory function, and providing overall and effective exercise for the whole body (2). Walking with sticks is widely used in the arsenal of methods of prevention, treatment and rehabilitation:

- with diseases of the cardiovascular system (with ischemic heart disease, arterial hypertension, vegetative-vascular dystonia, obliterating endarteritis of the vessels of the lower extremities);
- with non-specific chronic lung diseases;
- in diseases associated with metabolic disorders (obesity, metabolic syndrome, type 2 diabetes mellitus);
- for diseases of the musculoskeletal system (osteocondrosis, arthrosis, arthritis, osteoporosis);
- with nervous and mental diseases (with depressive states, Alzheimer's disease, Parkinson's disease).

Despite the fact that this sport has a moderate effect on the cardiovascular system, the musculoskeletal system, there are still restrictions and contraindications to the courses:

- herniated disc with radicular syndrome, myeloradiculopathy.
- decompensated aortic stenosis.
- violations of the heartbeat, heart rate (extrasystole, atrial fibrillation, tachycardia, bradycardia).
- hypertension crisis.
- early rehabilitation period after surgery, requiring bed rest.

Walking puts less strain on person's joints than more vigorous activities such as running or aerobics. However, it helps reduce the risk of osteoporosis, and the chances of falling while walking are much less likely. Walking reduces the likelihood of a hip fracture, as shown in a study of more than 30,000 men and women aged 20 to 93. Results start to show in a month and a half of regular exercise. Nordic walking is an ideal form of fitness for those who are physically inactive in life and cannot bring themselves to go to the gyms, do aerobics, exercise, and play sports. Scandinavian walking is a seemingly low-key sport, which, nevertheless, puts stress on the heart, lungs and muscles, and which is also indicated for very full people, the elderly, people in rehabilitation and suffering from diseases of the musculoskeletal system.

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