Summary

Autor

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Title

Evaluation of the effectiveness of physiotherapy practice in prevention of falls -literature review

Objectives

The aim of this thesis is to find out which physiotherapeutic methods and techniques are currently used to prevent falls in seniors and which of these methods appear to be most effective in preventing falls. Furthermore, the work is focused on summarizing current knowledge of this issue.

Methods

The thesis is processed in the form of literature review and has an analytical-descriptive character. The studies used meet the predetermined criteria. The thesis is divided into several parts. In the first part, which is called theoretical basis, are described mainly physiotherapeutic methods and techniques, which are currently used to ensure the prevention of falls in seniors. The second part, part of the results, summarizes these physiotherapeutic techniques and methods and evaluates their effect. The thesis is concluded with a discussion, which is focused mainly on two basic research questions of the thesis.

Results

A total of 13 randomized controlled trials and 3 systematic searches and meta-analyzes that met the criteria for inclusion in this thesis were described. Studies, research and meta-analysis show that the following physiotherapeutic techniques and methods are currently used in the prevention of falls in seniors: virtual reality training in the form of a game, whole body vibration alone, or in combination with resistance balance training, balance training using sensorimotor elements stimulation, strength resistance training with the use of aids and fitness machines, multi-component functional circular training, walking practice in field conditions, walking training in virtual reality using a rhythmic step mechanism, performance training focused on strengthening the center of the body in combination with strengthening of the knee and ankle extensors, training of ocular muscles, flexibility training in the form of Pilates, Yoga, balance training in the form of Tai-chi chuan and Qi-gong, Sensomotor stimulation, Proprioceptive neuromuscular facilitation ad.

The question of which of these methods is most effective in preventing falls in seniors cannot be conclusively answered. Currently, the most used is resistence training in combination with balance exercises and walking practice.

Keywords

prevention, fall, physiotherapy in fall prevention, effectiveness, physiotherapy procedures, approaches, sports activities, senior or elderly or elderly adult, falls, prevention, prevention falls, prevention falls physiotherapy, physiotherapy in prevention of falls, fall prevention, prevention, fall, physiotherapy to prevent falls, efficiency, physiotherapy, approaches, sports activities, senior or person higher age.