

THE EFFICIENCY OF PROCESSES FOR PREVENTION, THERAPY AND RECUPERATION OF THE MUSCULO-ARTRO-KINETIC SYSTEM

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Abstract: *This project is known as “David SPINE CONCEPT”. At European level, (between 1988-2007), in the epidemiologic area, were outstanding international studies in the development of scientific methods of a comprehensive concept, applied and proven in practice, aimed at preventing and resolving the somatic back problems.*

Keywords: *spine, efficiency, therapy, recovery, elderly persons*

PROBLEM STATEMENT: Spinal flexibility and the strength of muscles it is important factors, without which the column lose the ability to absorb shocks and becomes more vulnerable to injury. Joints should be used in order to keep their mobility, as the muscles-both the abdominal and the back should used to keep them strong. The lifestyle of many of us is not to maintain a good joint mobility and a strong muscle tone, therefore adopting a program of exercise is essential. At European level, (between 1988-2007), in the epidemiologic area, were outstanding international studies in the development of scientific methods of a comprehensive concept, applied and proven in practice, aimed at preventing and resolving the somatic back problems. This project is known as “David SPINE CONCEPT”. Because in 2007 the concept David Spine won first place in Europe for prevention and recovery through movement (for the extension of the lumbar – David chest F110 and F130 David abdominal flexion device, in this paper we propose ourselves to follow the impact of these devices on two categories of similar ages (55-60 years and 60-65 years), female and whether recovery will highlight the differences between groups.

THE PURPOSE of the study is to contribute to the improvement of the field of study with methodological and scientific knowledge currently being used to prevent musculo-artro-kinetic system from damaging the female persons in recovery for various locomotors disorders.

HYPOTHESIS: It is assumed that the development and implementation of the program of prevention and therapy equipment in preparation DAVID subjects (55-60 years) female, will increase the elasticity, strength and muscle resistance involved to support the spine.

CONCLUSIONS: In accordance with the results based on correlative matrix calculations showed that correlations are statistically significant at $p < 0,05$ - $p < 0,0005$ on a range of values from 0.69 to 1.00. The program developed and implemented in a period of 6 months with DAVID SPINE system was effective and the hypothesis was confirmed.

THE METHODS used in our research were selected in the specific field (literature study, interview and sociological investigation, experiment teaching mathematical statistic method of processing and interpretation of data, graphical representation method, and comparative results). For our research we have established a set of targets based on the study of theoretical concepts and practical specialists dealing with prevention and recovery issues on the devices and its implications in progress DAVID subjects (55-65 years). Based on determining the level of morphological, functional, physical, along with the definition/determination the capacity of social integration capacities of the subjects have developed and applied period therapy program for 6 months. At the end of the research we have argued in terms of experimental therapy program in the samples of this study. The subjects involved in this research were 60 female subjects (in two samples), 30 aged between 55-59 years and 30 aged between 60-65 years, people who don't have a prior physical education and frequently have lower back pain and neck pain.

FINDINGS AND RESULTS obtained from the DAVID program spines are statistically significant with a value of $p < 0,05$ to test the cervical mobility extension, the best indicator of the progress being made by sample II study with the an average growth of 12.1 degrees, 8.7 degrees respectively for sample I. Statistically significant results with a value of $p < 0,01$ run in an maximum isometric strength testing cervical flexion, the best indicator is Sample Progress I by 3.8 degrees and 2.1 degrees, where II of the study sample, resulting that increased cervical mobility on extension leads to increased maximum isometric flexion force.