Strong evidence of the benefits of exercise therapy in chronic diseases
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There is strong evidence of that aerobic exercise, strength training and condition-specific therapeutic exercise affect positively on the functional capacity of patients with chronic diseases. This is revealed in an extensive systematic analysis of published research data by the Faculty of Sport and Health Sciences, University of Jyväskylä, Finland. The systematic review of meta-analyses evaluates the effects of exercise therapy on more than twenty of the most common chronic diseases such as osteoarthritis, rheumatoid arthritis, coronary artery disease, heart failure, type 2 diabetes, different types of cancers, and Alzheimer's disease.

With the help of the systematic review, health professionals are now able to get an overview of the effects of exercise therapy on chronic diseases. Earlier this would have required the professionals to go through and extract information from thousands of scientific articles. Only data based on randomised controlled trials were accepted into the analysis, ensuring high scientific quality of the studies and maximal reliability of the results.

In the review, exercise was found to have a positive effect on approximately 85 percent of the studied physical performance and functional capacity indicators, such as the six-minute walking test, maximal lower body muscle strength, the Berg balance test and the patient's self-assessed ability to perform everyday functions. Approximately 20 percent of the indicators proved to have a large effect on the patient's functional capacity while the remaining indicators had a medium to small effect. The results were similar regardless of whether objective performance measurements or the patient's subjective assessments were used as the indicator of functional capacity.

The results also show that exercise training is safe for patients with chronic diseases. That is, the amount of reported adverse effects was at the same level in both the exercise groups and the non-exercise groups. However, it should be noted that the quantity and type of adverse effects was often poorly reported in the studies.

"We hope that this article will remind health professionals to tailor appropriate exercise training even more actively for patients with chronic disease, also when exercise is not used to treat the disease but to prevent secondary disability caused by the disease," says Physiotherapist Tero Pasanen.

The results of the study will be published in the international British Journal of Sports Medicine. The research was funded by the Rehabilitation and Physical Exercise Foundation Peurunka.


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