

Two questions can reveal mobility problems in seniors

Authors:

Alessio Bricca, Postdoc, University of Southern Denmark
Søren T. Skou, Professor, University of Southern Denmark

Hundreds of millions of people of all ages worldwide live with two or more chronic conditions – commonly defined as multimorbidity. Those living with it are found to have poorer physical and mental health, a high risk of being admitted to hospital and a higher risk of dying prematurely compared to people with only one chronic condition.

Given that the number of people living with multimorbidity is only expected to rise in the future, finding better treatments is considered the next major health priority.

But despite multimorbidity being a leading cause of disability, research on treatments is still in its relative infancy. Few studies have investigated the long-term treatment options – and unfortunately the results of the studies done most often offer negligible improvements.



People with multimorbidity require treatments that will improve their physical, mental, emotional and social health, and of late more and more research is showing that exercise may actually be a broad-spectrum treatment for those living with multimorbidity and offer many of the improvements patients want.

Currently, multi-morbidity is managed by treating each chronic condition separately using available medicines. However, this approach may not reduce symptoms sufficiently, and can have additional adverse health effects. As many people consult several health care providers, and also end up taking multiple drugs (often at least one for each condition) there is a risk of adverse events that can be inconvenient and unsatisfactory for patients.

Exercise as medicine

Research has shown that exercise is an effective treatment for more than 26 chronic conditions, including psychiatric diseases such as depression, anxiety, stress and schizophrenia; neurological diseases including dementia, Parkinson's disease, multiple sclerosis; metabolic diseases including adiposity, hyperlipidaemia, metabolic syndrome, polycystic ovarian syndrome, type 1 and 2 diabetes; cardiovascular diseases including hypertension, coronary heart disease, heart failure, cerebral apoplexy, and intermittent claudication; pulmonary disease including chronic obstructive pulmonary disease, asthma, cystic fibrosis; musculoskeletal disorders including osteoarthritis, osteoporosis, back pain, rheumatoid arthritis; and cancer.

Research also shows exercise could potentially prevent at least 35 chronic conditions from developing.

Thanks to the overall effects on health such as lowering blood pressure, improving joint health and cognitive function, exercise therapy can benefit a range of chronic conditions. It also has a lower risk of negative side effects compared to pharmacological treatments. What should be noted, however, is that exercise requires physical effort, and like pharmacological treatments, the effects will diminish if the patient stops partaking.

The real question, could exercise therapy benefit people with multiple chronic conditions as well?

A recent review assessed the effect of exercise therapy on the physical and mental health of people with at least two of the following chronic conditions: osteoarthritis of the knee or hip, hypertension, type 2 diabetes, depression, heart failure ischemic heart disease and chronic obstructive pulmonary disease. The review established 23 studies that looked at adults 50 to 80 years of age.

The exercise therapy interventions used in the studies were at least partially supervised by a physiotherapist or an exercise physiologist. Most lasted 12 weeks on average and exercise was performed two to three times week, starting from low intensity and progressing to moderate to high intensity. The exercise therapies included were aquatic exercise, strength training, aerobic training and tai chi.

The review results showed unequivocally that exercise therapy improved quality of life, and reduced anxiety and depression symptoms. The benefits were higher in younger patients and patients who had higher depression symptoms before starting exercise therapy. This highlights that people with severe depression - often considered ineligible for exercise due to their depression severity – may benefit highly from exercise therapy.

Patients who participated in exercise therapy were also able to walk longer. Those taking part walked on average 43 metres more over six minutes than those not taking part in the exercise interventions. This improvement appeared to be important for the patient and it reduced their disability to a noticeable level. Exercise therapy also didn't increase the risk of non-serious side effects, such as knee, arm or back pain, or falls and fatigue. What's more, it reduced the risk of hospitalisation, pneumonia and extreme fatigue.

The benefits were similar across all the combinations of chronic conditions included in the study, effectively concluding that exercise could be a safe and effective therapy instead of increasing drug prescription in people with multiple chronic conditions.

Together with patients and healthcare professionals, many aged care facilities have or are developing and testing exercise therapy and self-management programmes to help carers understand whether personalised exercise therapy and self-management is effective in managing and treating multi morbidity conditions in their patients.

In the meantime, people with multi morbidity can improve mental and physical health by exercising two to three times a week. Aerobic workouts, strength training or a combination of the two can promote similar health benefits regardless of the conditions a person lives with.

Authors:

Alessio Bricca, Postdoc, University of Southern Denmark

Søren T. Skou, Professor, University of Southern Denmark

From Aged Care NZ Issue 02 2021