

key points

SELECTED BY

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As the tolerability of psychopharmacological agents decreases with age, exercise may be particularly helpful as a possible treatment or stabiliser of mood and cognitive function in older age. Exercise has been most commonly evaluated for the treatment of depression.

In the most recent Cochrane review the effect of exercise on depression was not significantly different from that of cognitive therapy. Studies of individuals over 60 years showed a higher efficacy than in individuals below 60 years. Studies of patients with moderate and mild depressive symptoms showed a lower effect than those restricted to patients with mild depressive symptoms.

Exercise interventions designed primarily for treatment of physical conditions in the elderly do appear to confer psychological benefits as well, with reduction in depressive symptoms over the course of treatment.

Depression is associated with increased levels of inflammatory cytokines. Exercise has been shown to have anti-inflammatory effects in subjects who are not depressed. Mastery of a new skill and positive feedback from others may increase feelings of self-esteem and therefore improve mood. Exercise may distract participants from persistent negative thoughts.

The effects of exercise on reducing depressive symptoms are not dissimilar to the effects of antidepressant drugs and cognitive behaviour therapy. Exercise may be a useful low-tech intervention for people with mild to moderate depression. In particular, exercise may be helpful in the elderly and in patients who have had insufficient response to, or are intolerant of, pharmacotherapy.

The WHO recommendations in adults aged 65 and above for physical and mental wellbeing are: at least 150 minutes of moderate-intensity aerobic physical activity or 75 minutes vigorous-intensity aerobic activity each week. Aerobic exercise should be performed in bouts of at least 10 minutes.

Exercise has been shown to improve executive function acutely in adults of all ages. It is possible that dance routines or other exercise regimens requiring some cognitive input may confer additional benefit to cognitive function.

Good management of the metabolic syndrome and cardiovascular risk factors, e.g. with aerobic exercise, is likely to reduce the future risk of Alzheimer's disease. Linked to this, it is thought that the respiratory component of aerobic exercise alone may protect the brain from chronic hypoxic and ischaemic changes and therefore improve cognitive function. Exercise has a moderate effect on the ability of people with dementia to perform activities of daily living and may improve cognitive function. It is likely that midlife exercise may also have an impact on later cognitive function.