Benefits of exercise programmes for people with dementia

Exercise programmes may have a significant effect on improving cognitive functioning in the ability of older people with dementia to perform activities of daily living. Exercise programmes may offer older adults with dementia. With an ageing population and a rise in dementia, it is important to establish the specific benefits that exercise may offer older adults with dementia.

Cochrane review questions

This Cochrane review explored two questions:

» Do exercise programmes for older people with dementia improve cognition, activities of daily living (ADLs), challenging behaviour, depression and mortality?

» Do exercise programmes for older people with dementia have an indirect impact on family caregivers’ burden, quality of life, mortality, or use of healthcare services (Forbes et al, 2013)?

Study characteristics

The review included 16 randomised controlled trials published between 1997 and 2012 involving 937 participants. Participants were aged over 65 years with a diagnosis of dementia, living in nursing homes (10 trials), graduated residential care (one trial), psychiatric facilities (three trials), to social contact alone (four studies), or social contact with additional activities such as films, singing and reading (three studies). One study did not provide any information about the control group.

The primary outcomes of interest were cognitive function, ADLs, challenging behaviours, depression and mortality. Secondary outcomes included caregiver burden, quality of life, mortality and use of healthcare services. The methodological quality of included trials was variable due to incomplete or unclear data reporting.

Summary of key evidence

Meta-analysis revealed significant results for the effect of exercise on cognition in eight trials and ADLs in six trials. However, these results should be treated with caution due to substantial unexplained heterogeneity, which was not reduced as a result of the meta-analysis.

Two of the four studies that examined the effect of exercise on challenging behaviour reported improvement. However, each failed to provide statistical evidence to support this claim; the two remaining trials revealed no significant effect. No significant results were reported for the effect of exercise on depression (six studies).

A significant improvement was reported on caregiver burden in one trial involving 40 participants.

It was not possible to ascertain a dose-response between the type, duration or frequency of exercise, or the degree of protection from cognitive decline and other outcomes.

Best practice recommendations

The results suggest that exercise programmes may have a significant positive effect on cognitive functioning and the ability to perform ADLs in older people with dementia. However, further research is required to identify best type, frequency and duration of exercise as well as differentiating between the different types and stages of dementia.

The burden experienced by informal caregivers providing care in the home may also be reduced if they supervise their family member with dementia while they participate in an exercise programme. Further community-based research is needed to specifically examine the effect of exercise on caregiver quality of life.

Reference


The full report, including references, can be accessed at tinyurl.com/cochrane-exer-dement

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