
SYSTEMATIC REVIEW

Does the ‘Otago exercise programme’ reduce mortality and falls in older adults?: a systematic review and meta-analysis

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Article in *Age and Ageing*, 2010

Background: Falls and fall-related injuries are a serious consequence of ageing.

The ‘Otago exercise programme’ (OEP) is a strength and balance retraining programme designed to prevent falls in older people living in the community. This article was a review of all the available evidence on the effect of the Otago Exercise Programme on the risk of death and fall rates on adults.

All participants were 65+ years old and were living in the community. Participants engaged in a tailored, home based, strength and balance retraining programme, where resistance to lower limb muscles was provided via ankle cuff weights and the programme was carried out at least three times per week. The programme increased in difficulty either by increasing resistance, repetitions, difficulty of the exercises or by increasing distance walked.

Participants in the trials were followed up at 12 months to analyse the fall and mortality rates. The Otago Exercise Programme was shown to significantly reduce the risk of death over 12 months and significantly reduced fall rates. For those that were exercising three times per week, the risk of a fall was 77% lower than those who were exercising once or less per week.

Conclusion: The Otago Exercise Programme significantly reduces the risk of death and falling in older community-dwelling adults.