

Exercise or manual physiotherapy compared with a single session of physiotherapy for osteoporotic vertebral fracture: three-arm PROVE RCT

Karen L Barker,^{1,2*} Meredith Newman,^{1,2}
Nigel Stallard,³ Jose Leal,⁴ Catherine Minns Lowe,²
Muhammad K Javaid,¹ Angela Noufaily,³
Anish Adhikari,⁴ Tamsin Hughes,² David J Smith,¹
Varsha Gandhi,¹ Cyrus Cooper¹ and Sarah E Lamb¹
on behalf of the PROVE trial group

¹Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, Oxford, UK

²Physiotherapy Research Unit, Nuffield Orthopaedic Centre, Oxford University Hospitals NHS Foundation Trust, Oxford, UK

³Division of Health Sciences, Warwick Medical School, University of Warwick, Coventry, UK

⁴Health Economics Research Centre, Nuffield Department of Population Health, University of Oxford, Oxford, UK

*Corresponding author karen.barker@ouh.nhs.uk

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

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Plain English summary

The PROVE RCT

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Plain English summary

Osteoporosis is a condition in which bones lose their strength and are more likely to break. It affects around 3 million people in the UK. Fractures of the spine are very common in people with osteoporosis. They can cause a change in body shape, back pain and difficulty with carrying out daily tasks. A treatment that may help people is physiotherapy. There is evidence that several different types of physiotherapy, such as exercise or manual (hands-on) therapy, may help. This was the largest trial of physiotherapy for people with osteoporotic vertebral fracture to date. Seven sessions of physiotherapy treatment based on either exercise or manual therapy were compared with a single 1-hour session of individualised advice from a physiotherapist. The outcome of these treatments was assessed using recognised measures of quality of life, back muscle strength, pain, function and activity at 4 months and 1 year after treatment. How safe the treatments were and whether or not they had any impact on falls or the costs of health and social care were also examined. Interviews were conducted with some of the participants in the trial to seek their opinion about the treatment that they had received. The results show that the participants tolerated all the treatments well, with no significant safety issues, and perceived treatment to be beneficial. The study did not find significant differences between the three treatments in terms of clinical effectiveness or cost-effectiveness at 1 year, although there were benefits in some areas at 4 months.

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