

Introduction

Lumbar spinal stenosis is a disabling condition affecting older people and there is a need to provide effective rehabilitation. The BOOST programme is a group physical and psychological intervention for people with spinal stenosis that we evaluated in the BOOST randomised controlled trial (RCT). The BOOST programme significantly improved walking at 6 and 12 months, reduced falling risk and was cost-effective compared to best practice advice. Disability improved at 6 months.

Method

A two-stage implementation study.

Stage 1: We worked with stakeholders to optimise the programme for implementation and evaluated delivery of the optimised programme at 4 sites. Participants completed the Oswestry Disability Index (ODI) and 6-minute walk test at baseline and 6 months.

Stage 2: Integrating stage 1 feedback, we developed and evaluated a Massive Online Open Course (MOOC) to train physiotherapists. We evaluated outcomes when delivering the BOOST programme by a subset of MOOC learners at 9 sites.

We used a synthetic control method to test the optimised programme and compare with the BOOST RCT.

Results

MOOC evaluation: 31 learners enrolled in the MOOC. 24/31 (77%) provided feedback and were satisfied with the training and confident to deliver the programme. 21/24 (87.5%) intended to implement it. At 6 months, 18/31 (58%) responded. 12/18 (66%) reported delivering the programme and 4/18 (22%) reported using programme elements.

Clinical outcomes: In total, 105 participants attended the optimised BOOST programme. 83 participants completed follow up (79%). Implementation study participants had larger reductions in ODI compared to the BOOST trial control arm [-4.65 points (95% CI -1.53, -7.78)] and walked further [64.85m (95% CI 42.21, 87.49)]. Increases in walking were twice that seen in the RCT.

Conclusions

We demonstrated successful implementation of the BOOST programme using a MOOC to train physiotherapists. Improvements in outcomes suggest optimisation was worthwhile.