



Title	Exercise Evaluation Randomized Trial (EXERT): A Randomized Trial Comparing GP Referral for Leisure Center-Based Exercise, Community-Based Walking, and Advice Only
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Aim

To evaluate and compare the effectiveness and cost effectiveness of a leisure-center-based exercise program, an instructor-led walking program, and advice only in GP-referred patients.

Conclusions and results

Followup rates were 66% of those eligible at the 10-week assessment, 60% at 6 months, and 50% at 1 year. Primary outcomes were analyzed by intention to treat.

By 10 weeks, all 3 study groups had increased their duration of activity (at least moderate intensity). By 6 months, the duration of at least moderate activity was significantly higher than at baseline. At 1 year, both leisure center and walking groups maintained significant increases compared with baseline. There was no significant difference between the increases in duration of at least moderate activity in the 3 study groups at any assessment point.

There was a net increase in the share of participants achieving at least 150 minutes per week of at least moderate activity in the sport/leisure and walking categories in all 3 study groups. Systolic and diastolic blood pressure were significantly reduced in all groups at each assessment. There were significant, sustained improvements in cardiorespiratory fitness, leg extensor power, and small reductions in total and LDL cholesterol in all groups, but no consistent differences between the groups for any parameter over time. All 3 groups showed improvement in HADS anxiety and SF-36 mental well-being scores 6 months after the trial started. Leisure center and walking groups maintained this improvement at 1 year.

Costs to the participants were GBP 100 for the leisure center scheme and GBP 84 for the walking scheme. Provider costs were GBP 186 and GBP 92 respectively. Changes in overall SF-36 scores were small, and advice only appeared to be the most cost-effective intervention.

Recommendations

Referral for tailored advice supported by written material and supplemented by detailed assessments, may be effective in increasing physical activity. Inclusion of a 10-week program of supervised exercise classes or walks may not be more effective than providing information about their availability. On cost-effectiveness grounds, assessment and advice alone from an exercise specialist may be appropriate to initiate action. Walking seems to be as effective as leisure center classes and is cheaper.

Methods

Single center, parallel group, RCT, consisting of 3 arms, with the primary comparison at 6 months. The 2 structured exercise groups were followed for a further 6 months, while subjects in the control arm were re-randomized to one of the other trial arms and followed for a further year.

Further research/reviews required

- Updated meta-analysis of published exercise interventions
- Standardized methods for measuring and presenting outcomes
- Supplement physical activity questionnaires with objective measurements
- Identify components of interventions that benefit particular target groups and compare with minimal intervention
- Compare effectiveness and cost-effectiveness of opportunistic referral by GPs and practice nurses vs proactive 'cold calling' of at-risk individuals
- Compare strategies for involving groups underrepresented in present schemes
- Qualitative research with referring clinicians and participants to determine reasons for success and failure.