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DETERMINANTS OF MAINTAINED INCREASE OF AEROBIC EXERCISE IN AGING MEN AND WOMEN IN A 4-YEAR RANDOMIZED CONTROLLED TRIAL: THE DR'S EXTRA STUDY

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Objectives

Aim was to study determinants of maintained increase of aerobic exercise in older adults.

Methods

Participants aged 57-78 years were from DR's EXTRA study, a population-based randomized controlled trial on health effects of exercise and diet. We included individuals with low baseline aerobic exercise randomized into reference and diet groups (control group, n=169) and into aerobic exercise and aerobic exercise + diet groups (aerobic exercise group, n=185). Maintained increase of exercise was defined as ≥ 60 minutes of moderate-to-vigorous aerobic exercise per week reported at 2 and 4 years than at baseline. Studied determinants were baseline demographic, health and lifestyle variables.

Results

Individuals in aerobic exercise group were more likely (OR 2.5 [95% CI 1.5-3.9]) to maintain increased exercise than those in control group. In aerobic exercise group those who were working at baseline were 2.5 times [1.2-5.3] more likely, while individuals aged ≥ 68.4 years old (0.4 [0.2-0.9]), having satisfactory or poor health (0.5 [0.3-0.9]) or ≥ 2 chronic diseases (0.4 [0.2-0.9]) were less likely to maintain increased exercise than others. Intervention group modified associations of working status, age, depressive symptoms and light exercise with maintenance of increased exercise.

Conclusions

Intervention was efficient in maintaining increased exercise over 4 years among those with low baseline exercise. People near retirement were most responsive to exercise counseling.