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Barriers and Motivators to Undertaking Physical Activity in Adults ≥ 70 – A Systematic Review of the Quantitative Literature

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Background

Physical activity (PA) has multiple important benefits for older adults, but many do not undertake the recommended amount. This systematic review examined the quantitative literature detailing barriers and motivators to PA in older adults: a concurrent qualitative review is underway. Previous reviews investigated younger age groups or specific diseases.

Methods

We included adults ≥ 70 years, observational studies and baseline data for randomised controlled trials (RCTs); we excluded studies of specific disease groups, care home residents, and rates of cognitive impairment above population norms. We searched Medline, Embase, CINAHL and PsycINFO on 25th February 2020. We assessed risk-of-bias using ROBANS. We undertook a narrative review; meta-analysis was not possible. The protocol was registered on PROSPERO (CRD42021160503).

Results

We identified 35 papers (24 cross-sectional studies, eight prospective cohort studies, two studies of baseline data from RCTs and one mixed methods study); $n = 26,264$ subjects, median age 77.7 years (range 70-101) and median percentage female 62.1% (range 0-100). Quality assessment identified low risk-of-bias overall, except two studies were identified as having a high risk-of-bias for one section (confounding variables). The most cited barriers were physical health (N=14 studies), environmental factors (N=12), fear of falls (N=7) and lack of interest (N=4). Other barriers identified were lack of company (N=1) and urine leakage (in women) (N=1). Key motivating factors included social aspects of PA (N=8), intrinsic/psychological (e.g. self-determination, future orientation) (N=8), health (e.g. doctor's advice) (N=7) and environmental (e.g. nearby green space) (N=4).

Discussion

This review identified key barriers and motivators to PA in older adults. There is a lack of evidence for the oldest old. These findings should be used to create trials of suitable interventions which enable older adults to take up and maintain recommended levels of PA. The wide range of factors we identified indicates an individualised approach may be best.