

interaction) and in the folkdance intervention (IRR=1.68, 95% CI:1.03 -2.73). Social dancing did not prevent falls or its associated risk factors among villages' residents. Modified dance programmes that contain "training elements" to better approximate structured exercise programs, targeted at low and high-risk participants, warrant investigation.

DOES DEPRESCRIBING FALL-ASSOCIATED DRUGS REDUCE FALLS AND ITS COMPLICATIONS?: A SYSTEMATIC REVIEW

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Falls are the leading cause of injury and injury-related hospitalizations for seniors in Canada with annual health-care costs exceeding \$2 billion. Despite limited evidence of effectiveness, the withdrawal (discontinuation or dose reduction) of "fall-risk increasing drugs" (FRIDs) is typically part of falls prevention strategies and hospital accreditation initiatives. The study objectives were to determine the preventative efficacy of FRID withdrawal on falls and fall-related complications. An electronic search was conducted in MEDLINE, EMBASE, CENTRAL and CINAHL. A grey literature search included trial registries and conference abstracts. All randomized controlled trials in adults age ≥ 65 evaluating FRID withdrawal compared to usual care on falls rate or incidence, fall-related injuries, fractures or hospitalizations and/or adverse effects related to the intervention were included. Two reviewers independently screened eligible studies, abstracted data and assessed risk of bias. The GRADE criteria were used to rate overall confidence in effect estimates for outcomes. Five trials involving 1309 participants met eligibility criteria for inclusion. A FRID withdrawal strategy did not significantly change the rate of falls (RaR 0.98, 95% CI 0.63 to 1.51), number of fallers (RR 1.06, 95% CI 0.84 to 1.34) or rate of fall-related injuries (RaR 0.89, 95% CI 0.57 to 1.39) over a 6 to 12 month follow-up period. There is insufficient evidence that a FRID withdrawal strategy is effective for preventing falls. Based on very low quality evidence, it is uncertain whether FRID withdrawal leads to any appreciable clinically important benefit. Data evaluating the potential harms of FRID withdrawal is lacking.

EXERCISE TO PREVENT FALLS IN OLDER ADULTS: AN UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS

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Previous meta-analyses have found exercise as a single intervention prevents falls in older people. This updated systematic review with random effects meta-analysis and meta-regression aimed to test whether this effect is still present when new trials are added and explore trial characteristics associated with greater fall prevention effects. One hundred comparisons from 89 randomised trials with 19,869 participants were available for meta-analysis. Overall, exercise reduced the rate of falls in community dwelling older people by 21% (pooled rate ratio 0.79, 95% CI 0.73 to 0.85, $p < 0.001$, I^2 47%, 67 comparisons) with greater effects seen from exercise programs that challenged balance and involved more than three hours per week of exercise. Together these variables explained 76% of the between-trial heterogeneity and in combination led to a 39% reduction in falls (IRR 0.61, 95% CI 0.53 to 0.72, $p < 0.001$). Exercise also had a fall prevention effect in community-dwelling people with Parkinson's disease (pooled rate ratio 0.47, 95% CI 0.30 to 0.73, $p = 0.001$, I^2 65%, 6 comparisons) or cognitive impairment (pooled rate ratio 0.55, 95% CI 0.37 to 0.83, $p = 0.004$, I^2 21%, 3 comparisons) but not in residential care settings or among stroke survivors, people with severe visual impairment or people recently discharged from hospital. Exercise as a single intervention can prevent falls in community dwelling older people, promising results are seen in people with Parkinson's disease or cognitive impairment but its impact in other clinical groups and aged care facility residents requires further investigation.

FALLS AND THE SOCIAL ISOLATION OF OLDER ADULTS IN THE NATIONAL HEALTH AND AGING TRENDS STUDY

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Falls among community-dwelling older adults can be life threatening. While an association between social isolation and falls has been described, the nature of that relationship is not well documented and could be important for fall prevention interventions. Study objectives were to describe the incidence of falls, prevalence of social isolation, and extent to which social isolation predicts falls in older adults. Secondary analysis of longitudinal data from the National Health and Aging Trends Study, involving a nationally representative sample of Medicare beneficiaries, included four rounds of annual interviews in participants' homes (round one $n = 7,609$). Social isolation was operationalized for the current analysis as a multiple-indicator, domain-inclusive construct based upon the Social Network Index. Falling during the previous year was self-reported. Incidence of falls ranged from 22.4–26.2% across the four rounds. Social isolation prevalence ranged from 19.8–21.9%. The probability of falling increased with each increase in social isolation construct score. Even after adjusting for age, gender, and education, social isolation significantly predicted falling (OR=1.08; CI=1.02–1.14). Adding self-reported general health, depression, and worry about falling to the model weakened the relationship between social isolation and falls (OR=1.02; CI=0.96–1.08). Adding the Short Physical Performance Battery, assistive mobility device use, and