

C-statistics of 0.67, 0.71, 0.71, 0.75 for mortality (versus C-statistic for age and sex: 0.66); 0.59, 0.64, 0.63, 0.70 for hospitalization (versus C-statistic for age and sex: 0.58); and 0.64, 0.63, 0.63, 0.70 for activities-of-daily-living disabilities (versus C-statistic for age and sex: 0.61), respectively. Conclusions: The choice of a claims-based frailty measure results in a meaningful variation in the identification of frail older adults at high risk for adverse health outcomes. Claims-based frailty measures that included demographic variables offer limited risk adjustment beyond age and sex.

EFFECT OF CHAIR YOGA ON FRAILTY IN OLDER ADULTS WITH LOWER EXTREMITY OSTEOARTHRITIS: RANDOMIZED CLINICAL TRIAL

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This study examined whether chair yoga (CY) could reduce severity of frailty in community-dwelling older adults with lower extremity osteoarthritis (OA). Participants were randomly assigned to CY or health education program (HEP) at each of two sites and attended twice-weekly 45-minute sessions for 8 weeks. Data were collected at baseline and 4 and 8 weeks. For primary analysis, followed by Rockwood's suggestion, 97 deficits/variables measuring OA symptoms, physical function, balance, fatigue, depression, social activities, and life satisfaction were used to construct a frailty index, ranging from 0 to 1. Fewer deficits/variables were used to construct three alternative versions of the index. Linear mixed-effects models with random intercept were used to analyze longitudinal repeated outcome measures. A total of 112 participants (n = 63 CY, n = 49 HEP; 75.3[7.5] years; 76% female, 46% Hispanic) completed the study. After adjusting for site, cohort effect, and baseline of frailty, there was no significantly greater decline in frailty in the CY group compared to the HEP group (between-group difference, -0.019; 95% CI, -0.063 to 0.025) or the trend of changes in the index (p for interaction = .489). Additional adjustment for baseline characteristics (age, gender, ethnicity, marital status, living alone, health status, pain medication) did not change results substantially. Secondary analysis of three alternative versions of the index indicated similar nonsignificant changes. Thus, an 8-week CY intervention did not reduce severity of frailty in older adults with lower extremity OA. A longer duration of CY with a larger sample size is needed.

THE ASSOCIATION BETWEEN LOWER EXTREMITY FUNCTION, FRAILTY, AND LOW-MILEAGE DRIVER STATUS AMONG OLDER ADULTS

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The crash rate per mile driven among older adults is higher than that of most age groups and comparable to that of the youngest, most inexperienced drivers. The low-mileage bias posits that the elevated rate among older adults results from an increased rate among those who accrue the fewest annual miles. This study evaluated whether low physical capacity among older drivers, measured by the National Health and Aging Trends Study (NHATS) Expanded Short Physical Performance Battery (SPPB) and Fried's frailty phenotype, increases the risk of being low-mileage drivers. Data were collected for 2,990 older drivers via questionnaires and assessments in addition to 61,528 person-months of driving data. Multivariable log-binomial regression was used to estimate risk ratios. Those with fair and good function had 0.53 (95% CI: 0.40-0.69) and 0.60 (0.47-0.78) times the risk of driving fewer than 3,000 miles/year and 0.45 (0.26-0.77) and 0.48 (0.32-0.72) times the risk of driving fewer than 1,865 miles/year, respectively, compared to those with poor function. For an increase from not frail to pre-frail and from pre-frail to frail, the risk of driving fewer than 3,000 or 1,865 miles/year increased 1.36 (1.11-1.65) or 2.38 (1.63-3.46) times, respectively. Having low physical capacity is associated with an increased risk of low annual mileage. Given the known association between low-mileage driver status and increased crash rates and the modifiable nature of the risk factors examined in this study, interventions aimed at improving physical capabilities may lead to an improvement in safety among older drivers.

THE ELECTRONIC FRAILTY INDEX BASED ON THE COMPREHENSIVE GERIATRIC ASSESSMENT: DEVELOPMENT AND TESTING

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Frailty is characterized by loss of biological reserves across multiple systems and associated with increased risks of adverse outcomes. A Frailty Index (FI) constructed using items from the Comprehensive Geriatric Assessment (CGA) has been validated in geriatric medicine settings to estimate the level of frailty. Traditionally, the CGA used a paper form and the CGA-based FI calculation was a manual process. Here, we reported building of an electronic version of the assessment on personal computers (PC), i.e., standalone eFI-CGA, to benefit frailty assessment at points of care. The eFI-CGA