 Older adults with low expectations for aging are less likely to participate in physical activity.
DEPRESSIVE SYMPTOMS AND CARDIAC FUNCTIONAL STATUS IN OLDER PATIENTS WITH CORONARY DISEASE: THE HEART AND SOUL STUDY. F. Roel, H. Liu, M.A. Whiting & 1University of California, San Francisco, San Francisco, CA (Tracking ID #75160)

BACKGROUND: Little is known about the extent to which cardiac functional status is determined by psychosocial versus physiological factors. We sought to examine the contributions of depressive symptoms and heart disease severity to New York Heart Association (NYHA) Functional Classification in older patients with coronary heart disease (CHD).

METHODS: We performed a cross-sectional study of 721 older patients with stable CHD who were recruited between September 2000 and May 2002 from outpatient clinics in San Francisco, CA. We administered the Patient Health Questionnaire for measurement of depressive symptoms. We assessed heart disease severity using left ventricular ejection fraction by echocardiography, exercise capacity by treadmill, and indinavir ischemia by stress echocardiography. Participants chose one of 4 NYHA categories to describe their functional status: no cardiac activity, slight limitation, marked limitation, or unable to perform activities because of fatigue, dizziness, or chest pain. We examined predictors of functional status using ordinal logistic regression, adjusted for traditional cardiac risk factors.

RESULTS: Of the 723 participants (mean age 69 ± 11), 38% reported no limitation, 40% reported slight limitation, 17% reported marked limitation, and 5% reported severe limitation in functional status. Each standard deviation (5-point) increase in depression score was associated with a 50% increased odds of worse functional status (OR 1.5, 95% CI, 1.3–1.8; p = 0.001). Although exercise capacity and angina were associated with cardiac functional status, resting ejection fraction and inducible ischemia were not.

CONCLUSION: Depressive symptoms are strongly associated with cardiac functional status, but ejection fraction and inducible ischemia are not. Efforts to improve functional status in older patients with CHD should include assessment and treatment of depressive symptoms.

Predictors of worse functional status

<table>
<thead>
<tr>
<th>Adjusted OR (95% CI)</th>
<th>p value</th>
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<tbody>
<tr>
<td>Depressive symptoms (per SD)</td>
<td>1.5 (1.3–1.8)</td>
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<td>Angina (per SD)</td>
<td>1.3 (1.1–1.6)</td>
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<td>Exercise capacity (per SD)</td>
<td>0.4 (0.3–0.5)</td>
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<tr>
<td>Inducible ischemia (per SD)</td>
<td>1.1 (1.0–1.3)</td>
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OLDER ADULTS WITH LOW EXPECTATIONS FOR AGING ARE LESS LIKELY TO PARTICIPATE IN PHYSICAL ACTIVITY. C.A. Sarkisian, T.R. Prohaska, C.M. Mangione & 1University of California, Los Angeles, Los Angeles, CA, 2University of Illinois at Chicago, Chicago, IL (Tracking ID #73069)

BACKGROUND: Extensive epidemiologic data demonstrate that physical activity contributes to the health and quality of life of older adults, but unfortunately only 20% of men and 25% of women meet the national guidelines for regular physical activity. Our purpose was to determine whether having low expectations regarding aging is associated with low physical activity levels.

METHODS: We invited English and Spanish speaking adults aged 65 years and greater at 14 Los Angeles county senior centers to complete the Expectations Regarding Aging (ERA)-Survey, which is a 10-item scale that indicate expectations by older adults. Participants also completed instruments measuring physical activity (Longs Self-management Behavior Exercise Survey) health-related quality of life (HRQoL, Medical Outcomes Study Short-Form-12), medical comorbidities (Katz version of Charlson comorbidity scale), basic and instrumental activities of daily living (ADLs), and depressive symptoms (Geriatric Depression Scale). We used t-tests and chi-squared tests to examine bivariate correlates of physical activity, and then constructed a multivariate regression model to determine whether expectations regarding aging are independently associated with physical activity levels.

RESULTS: Mean age of the 367 participants was 78 years, 77% were women, 44% were white, 16% were African American, and 17% were Latino. Approximately 15% of those invited to participate declined. Over the previous week, 40% of participants reported ≥30 minutes of moderate-vigorous physical activity. In bivariate analyses, this low level of physical activity was associated with: lower expectations regarding aging, older age, lower physical and mental HRQoL, greater ADL impairment and depressive symptoms (p < 0.002). In the multivariate analysis, after controlling for the independent effect of age, gender, HRQoL, comorbidity, number of ADL impairments, and depressive symptoms (p < 0.05 for both) in a multivariate regression model, older adults who had lower expectations regarding aging were more likely to have lower levels of physical activity, after controlling for the independent effect of age, gender, HRQoL, comorbidity, number of ADL impairments, and depressive symptoms (p < 0.05 for both). Multivariate analysis, after controlling for the independent effect of age, gender, HRQoL, comorbidity, number of ADL impairments, and depressive symptoms (p < 0.05 for both).

CONCLUSION: Among these older adults recruited at senior centers, having low expectations for aging is independently associated with having a low level of physical activity. It may be possible to improve rates of physical activity among community-residing older adults by intervening to raise their expectations regarding aging.

BREAST CANCER SCREENING IN WOMEN OVER 80. M.A. Schoenberger, E.P. McCarthy, R.B. Davis, R.S. Phillips, M.B. Hamel & 1Beth Israel Deaconess Medical Center, Boston, MA (Tracking ID #75856)

BACKGROUND: The benefits of screening mammography in women over 80 are uncertain and screening recommendations vary. Medicare has covered annual mammograms since 1998, but some very elderly women have little chance to benefit from their shorter life expectancy. We estimated national rates of mammography screening among women age 80 or older and examined the relationship between health status and screening within the previous 2 years.

METHODS: We studied 894 age 80 or older, without a history of breast cancer, who responded to the 2000 National Health Interview Survey, a nationally representative survey of the noninstitutionalized US population. We categorized illness burden by the presence of 0, 1, or 2 or more of several diseases known to shorten life expectancy (heart disease, stroke, COPD, cancer, diabetes, kidney failure, and liver disease). Functional status was categorized as no impairment (able to perform all ADLs and IADLs), moderate impairment (unable to perform one or more IADLs), and severe impairment (unable to perform more IADLs). Costs included sociodemographic factors, access to care, and treatment with hormone replacement. We further defined a subgroup of “chronically ill” women (those with ≥2 diseases, severe impairment, and at least one hospitalization within the past year) to determine the use of screening mammography in women least likely to benefit. All analyses were performed using SUDAAN.

RESULTS: Of the 894 women, 41% were 85 or older, 20% had 2 or more comorbid diseases, 17% had moderate and 12% had severe functional impairment, and 4% were “chronically ill.” More than activity, slight limitation age 80 or over received a screening mammogram within the past 2 years. Women with moderate and severe functional impairment were less likely to receive screening mammography than women without functional impairment (40% and 18% vs. 56% respectively, p = 0.0002). Women with 2 or more comorbid diseases were less likely to receive screening than those without disease (84% vs. 54%, p < 0.05). After adjustment, the likelihood of screening remained lower in women with moderate (OR 0.61, 95% CI [0.38–0.97]) and severe functional impairment (OR 0.41, CI [0.21–0.81]) compared with unimpaired women; women with ≥2 diseases remained less likely to receive screening than women without disease (OR 0.67, CI [0.40–1.00]). Twenty-seven percent of women in the “chronically ill” subgroup received a screening mammogram.

CONCLUSION: The majority of women ages 80 or older in the US receive screening mammograms. Rates are lower among women with functional impairments and comorbid diseases than even in these subgroup are below and at least two-thirds of women screened.

Our findings suggest that many very elderly women who have short life expectancies are receiving screening mammograms despite little chance of benefit.


BACKGROUND: The relationship between diphenhydramine and the risk of falls in hospitalized patients has not been studied. We sought to evaluate the risk of falls associated with diphenhydramine use and compare the risk of falls in hospitalized patients associated with the use of diphenhydramine versus other sedative hypnotic drugs in hospitalized patients.

METHODS: We conducted a matched case-control study of inpatients at a 328-bed community-based urban acute-care hospital. To avoid ascertainment bias has seen incident report, hospital personnel were instructed to utilize a pager to notify the “fall evaluator” when finding a patient with a suspected fall. Fall evaluators, trained hospital externs or residents, provided full time coverage during the study. The time that a patient fell was designated the index time. Controls were matched to cases by nursing unit and length, and assigned the same index time as the matched case for the purposes of exposure ascertainment. The medication administration record was blindly reviewed for all oral and parenteral medications administered within 24 hours of the index time for cases and controls. Sedative hypnotic drugs included benzodiazepines, zaleplon, and short-acting barbiturate hypnotics; eg, the drugs include chloral hydrate and zolpidem. Corticosteroids included conjugated, demoralized conditions, orders for restraints, use of falls precautions and as well as use of diuretics, opiates, cardiovascular or other psychotropic drugs at the index time.

RESULTS: Of 156,711 persons, 235 patients met our case definition for a fall. 136 (58%) were age 65 or older, 117 (50%) were female. The median hospital day on which the fall occurred was 4 (interquartile range = 2–10) and 148 (78%) fell on general medical or surgical units. 38 (16%) cases and 35 (14%) controls received diphenhydramine within 24 hours of the index time (univariate OR 1.1 95% CI 0.7 to 1.8). After adjusting for covariates, the multivariate OR was 1.1 (95% CI 0.6 to 2.0). In contrast, 83 (36%) cases and 59 (25%) controls received other sedative hypnotics within 24 hours of the index time (univariate OR = 1.7 [95% CI 1.1 to 2.6]). After adjusting for covariates, the multivariate OR was 1.6 (95% CI 1.0 to 2.4).