

through health personality dispositions. In addition, health personality factors directly influence the emotional and physical health of older adults.

SESSION 2907 (POSTER)

MOBILITY DISABILITY

ASSOCIATIONS BETWEEN COGNITIVE FUNCTION, BALANCE, AND MOBILITY IN COMMUNITY-DWELLING OLDER ADULTS WITH COPD

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Older adults with chronic obstructive pulmonary disease (COPD) are at risk for physical and cognitive impairment. Cognitive function is associated with falls in older adults however it is unknown if a relationship exists between cognitive function and falls in COPD. The aim of this study was to examine the relationships between cognitive function and balance and mobility in older adults with COPD. A secondary analysis was performed using data from the 2010 wave of the Health and Retirement Study (HRS) (N=4051). Cognitive (immediate and delayed recall, executive function) and physical (gait speed, tandem balance time) measure data was extracted from older adults with COPD (N=382) and an age matched control group without COPD (N=382) who met inclusion/exclusion criteria. Multivariate linear regression modeling was performed to examine associations between cognitive function and mobility or balance while controlling for age, gender, BMI, grip strength, and education. We found that in COPD, immediate word recall, delayed word recall, orientation, and executive function (β ranging from 0.004-0.02) were significantly associated with gait speed while only delayed word recall ($\beta = 0.122$, $p < .05$) was associated with tandem balance. These same associations did not exist in those without COPD. In older adults with COPD, cognitive function is associated with balance and mobility. Screening for cognitive function, specifically delayed recall, should be a part of the management of falls in this population.

CLINICAL SCREENING FOR LOWER LIMB MUSCLE WEAKNESS IN COMMUNITY-DWELLING OLDER WOMEN

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The objective of the present study was to evaluate the ability of the five times sit to stand test (5TSST), grip strength (GS) and step test (ST) to detect older women with reduced lower-limb muscle strength (LLMS), and to investigate the clinical usefulness of the combination of such tests. One hundred and nineteen older women were submitted to the 5TSST, GS, ST and lower limb peak torque by an isokinetic dynamometer. The capacity of the clinical tests to detect older women with reduced LLMS was measured using the ROC curve, followed by calculation of posttest probability (PoTP). The results show that a ST score of 0.24 cm per cm

of participant's height shows the best PoTP for a positive test (72%). However, the combination of the ST and 5TSST enhances the accuracy from 48% (prevalence of weakness in the population) to 82.6% if both tests are positive, and decreases the PoTP from 48% to 11.4% if both tests are negative. The inclusion of GS provided additional benefits of small magnitude. In conclusion, the ST performed alone or in combination with 5TSST could be an alternative for clinical screening of LLMS reduction in older women. The early identification of impairment of lower-limb muscle strength in independent older adults may favor early intervention and prevention of negative outcomes such as falls and functional limitations.

DIETARY QUALITY AMONG OLDER OVERWEIGHT OR OBESE VETERANS WITH DYSMOBILITY

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Older adults have unique dietary challenges due to a myriad of factors including age-related taste and smell changes and lack of nutrition knowledge that increase the risk for poor dietary quality. Healthier dietary quality is associated with higher muscle mass, strength and physical performance which may reduce the development of frailty and disability later in life; however, few studies have examined dietary quality among older Veterans with limited physical functioning. The purpose of this study was to examine overall dietary quality among older, overweight/obese veterans with dysmobility. Habitual dietary intake was assessed at baseline using three, nonconsecutive 24-hour recalls and used to calculate healthy eating index (HEI-2015; higher scores indicate higher diet quality). Twenty-eight participants were included in analysis: 93% male; 54% black; aged=69.5±7.0 years; BMI=35.5±5.4 kg/m². Means and standard deviations were calculated for average intake of total daily energy (2184±645 kcals) and protein (0.89±0.3g/kg), daily servings of fruits (0.84±0.94) and vegetables (1.3±0.87), and HEI-2015 (52.8±13.4). Overall, 96% consumed fewer than the recommended 5 daily servings of fruits and vegetables and 68% consumed <1.0g/kg/d of protein (1.0-1.3g/kg/d recommended for older adults). Mean HEI-2015 was below the US national average for adults >65 years (2015-2016 NHANES 65+ years: 64.0), suggesting poor dietary quality among our sample. This pilot study suggests that dietary intake quality is suboptimal in older, obese Veterans with disability and highlights the need to identify strategies that improve dietary intake quality of older Veterans who may benefit from obesity and disability management.

DISABILITY AND SYMPTOM BURDEN AMONG THE VERY OLD: COMPARISON OF SURVIVORS AND DECEDENTS

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How does disability and symptom burden among the very old differ between those who die and those who do not die over 12 months? We explored patterns of disability and symptom burden in the Health ABC cohort study, which involved quarterly phone interviews in 2011-14 (years 15-17). A proxy completed the interview when the proband was unable to participate. We identified a sample of 291 decedents with at least 1-year of follow-up before death and matched a 1:1 sample of survivors at the time of death by race, sex, and age (within ± 3 years). 252 decedents (age 90.0 ± 3.03 , 65.1% Black, 52.4% female) and 288 survivors (age 90.1 ± 3.03 , 64.9% Black, 52.4% female) with at least 3 quarterly interviews were included for analysis. Decedents had a higher proportion of proxy-reported interviews compared to survivors (40.9% vs 16.0%, $P < 0.01$). Disability prevalence among decedents was significantly higher ($P < 0.01$) compared to survivors (using an assisted walking device, 62.3% vs 37.4%; difficulty getting in/out of bed, 32.0% vs 19.4%; difficulty bath/shower, 28.9% vs 10.0%; difficulty dressing, 19.0% vs 8.7%). Decedents and survivors differed significantly ($P < 0.05$) in self-reported number of symptoms (2.35 vs 1.78), severity of disability due to shortness of breath (4.09 vs 2.04), constipation (3.97 vs 1.74), and difficulty concentrating (1.98 vs 1.25). Decedents also had a significant higher score ($P < 0.01$) on self-reported loss of appetite (2.24 vs 1.91) and worse global quality of life rating (3.04 vs 2.64), compared to survivors. The patterns were similar in proxy-reported group and in the group with a combination of self- and proxy-reported interviews. Even in very late old age, disability and symptom burden increase with the approach of death.

DISABILITY DURING THE LAST YEARS OF LIFE AMONG NONAGENARIANS: THE VITALITY 90+ STUDY 2001-2014

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Increasing life expectancy has postponed the last years of life to older ages. Previous studies have demonstrated that disability is determined by age, age at death and closeness to death but only few have focused on oldest old population. We examined disability during the last years of life among people aged 90 years and older between 2001 and 2014 and assessed whether it varied by age at death, sex and study year. We used population-based survey data from the Vitality 90+ Study years 2001, 2003, 2007, 2010 and 2014 (N=5711, response rate 77-86%) linked with dates of death from Statistics Finland. Disability was defined as dependency in daily activities (dressing, getting in and out of bed) and mobility (moving indoors, walking 400m, using stairs). We analyzed disability stratified by closeness to death and age at death for men and women in each study year with logistic regression method. Disability in daily activities and mobility increased systematically with closeness to death (>4, 3-3.99, 2-2.99, 1-1.99 and 1> years to death) for both sexes in each study year. Also higher age at death (90-91 vs. 94+ years) was associated with disability. These associations remained consistent throughout the study period. This study shows that in the oldest old population both closeness to death and age at death determine the level of disability. We suggest that the

complex and resource-draining care needs at the end of life will increase with growing number of people living their last years of life in very old age.

EFFECTS OF A MULTIDISCIPLINARY INTERVENTION ON DAILY-LIVING GAIT AMONG OLDER ADULTS WITH PARKINSON'S DISEASE

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Multidisciplinary interventions can improve gait and balance in patients with Parkinson's disease (PD). However, it is not yet known if these interventions also positively impact the quality of daily-living walking. We, therefore, examined the effects of a multidisciplinary, intensive out-patient rehabilitation program (MIOR) as delivered by the rehabilitation center of EZRA-LEMARPE organization on gait and balance as measured in the clinic and on every-day walking, as measured during 1-week of continuous measurement. 46 PD patients (age: 70.05 ± 7.71 ; gender: 31.3% women; disease duration: 8.85 ± 6.27 yrs) were evaluated before and after participating in 8-weeks of physical, occupational, and hydro-therapy, boxing, and dance (3 days/week; 5 hrs/day). After the intervention, clinical measures of balance (MiniBest Test of Balance delta: 1.82 ± 3.30 points, $p = 0.001$), mobility (TUG delta: -1.78 ± 6.15 sec; $p = 0.001$), and usual-walking speed (delta 19 ± 16 cm/s; $p < 0.001$) improved. Daily-living step counts and daily-living gait quality did not change ($p > 0.5$). In exploratory analyses, subjects were categorized as responders (Rs) and non-responders (NRs) based on changes in their daily-living walking gait speed. Rs increased their daily-living gait speed (delta: 10 ± 14 cm/s; $p < 0.001$); NRs did not. Rs (n=21) also improved their daily-living gait quality measures (e.g. stride regularity, step length, stride time variability). At baseline, disease severity (MDS-UPDRSIII) was lower ($p = 0.02$) in Rs (25.33 ± 11.47), compared to the NRs (34.38 ± 14.27). These results demonstrate that improvements in the clinic do not necessarily transfer to improvements in daily-living gait. Further, in select patients, MIOR can ameliorate daily-living walking quality, potentially reducing the risk of falls and other adverse outcomes associated with impaired mobility.

MOBILITY MATTERS: A PILOT STUDY ON INCREASING HEALTH LITERACY AMONG FALL-RISK ELDERLS

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Mobility is important to sustain for older adults to live independently. The purpose of this project was to evaluate teach back and ask me 3 interventions with a health education program that included Otago strength and balance exercise and a walking program The pilot program, Mobility