Poster Presentations

Aging

Measures of lower body function as predictors of mortality among Mexican Americans aged 75 and older

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Purpose: We expand previous research from the Hispanic Established Population for the Epidemiologic Study of the Elderly (H-EPESE) by examining the association between measures of lower body functioning and mortality over eight years. We hypothesize that objective and subjective measures of lower body function will predict mortality.
Methods: Data from the H-EPESE were used (2004-2013), which included adults aged 75 and older. The short physical performance battery (SPPB), walking speed, and self-reported lower body activities of daily living (ADLs) were used as measures of objective and subjective reported measures of lower body functioning. Cox proportional hazards models were used to assess the relationship between lower body function and mortality (n=1,657).
Results: Cox proportional hazard models show that lower SPPB score, slower walking speed, and ADL disability were associated with increased mortality. The two lowest SPPB score groups had hazard ratios of 2.15 (95% CI: 1.66, 2.79) and 1.56 (95% CI: 1.18, 2.06), the two lowest walking speed score groups had hazard ratios of 2.05 (95% CI: 1.53, 2.76) and 1.44 (95% CI: 1.05, 1.96), and those reporting any ADL had hazard ratios of 1.75 (95% CI: 1.50, 2.04).
Conclusions: Subjective measures of functioning can provide similar mortality information to objective measures in this population of underserved individuals aged 75 and older. This has clinical implications since information on self-reported ADLs is quicker to obtain than physical batteries.

Association among sleep duration with nap and stroke stratified by self-health status among Aging-Chinese health and retirement longitudinal study

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Purpose: Although short sleep duration is related to chronic conditions such as stroke, this association is less well-known stratified by health status. We assessed the association between total sleep duration and stroke in different health status among elderly Chinese.
Methods: Data were derived from the 2011 China Health and Retirement Longitudinal Study (CHARLS) with 4,729 respondents over 65 years old. Binary logistic regression was used to estimate the odds ratio (AOR) and 95% Confidence Internal (95%CI) of the association between total sleep time and stroke stratified by self-health status adjusting for confounders.
Results: After adjusting for demographic characteristics, socioeconomic status, lifestyle, health status and comorbidity, there was an association (AOR=2.05, 95%CI 1.31-3.19) between total sleep duration (less than 7 hours per day) and stroke. Stratifying by self-health status, in those who reported with good health status, there was no significant association between total sleeping time and stroke among those who reported good health status. However, in those reporting poor health status, the total sleeping time (less than 7 hours per day) was 2.11 (95%CI 1.30-3.44) times to report with stroke than those with a normal total sleeping duration. Disability status was associated with stroke in both self-reported good and poor groups (AOR=2.89, 95%CI 1.04-8.07; AOR=2.62, 95%CI 1.84-3.73, respectively). However, residence status was only associated with stroke among individuals reporting poor health (AOR=0.62, 95%CI 0.41-0.94).
Conclusion: Stroke is significantly associated with total sleeping time among individuals reporting poor health. Policy should be made targeting this vulnerable population in preventing stroke.

The association of ethnicity and Hispanic acculturation status with advance directive completion among older patients in an integrated health system

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Purpose: Hispanics have lower Advance Directive (AD) completion than non-Hispanic whites. Few studies have investigated the role of acculturation in end of life planning. We aimed to assess whether acculturation (language preference and needing an interpreter) affected AD completion and hypothesized less acculturated Hispanics would have lower rates of AD completion than English speakers.
Methods: This retrospective cohort study analyzed 620,948 electronic medical records from a Northern California integrated health system between 2013 and 2017 to examine AD completion by January 1, 2018 patients aged 55 years or older, and whether acculturation and having an AD among Hispanic patients were associated. Descriptive statistics and bivariate analysis were performed to compare AD completion among non-Hispanic whites, Hispanics, and Hispanic subgroups by acculturation status (English-speaking, Spanish-speaking and needed interpreter). We conducted multivariable logistic regression to determine the relationship between Hispanic acculturation and having an AD while controlling for demographic, clinical and utilization factors.
Results: We found 20.3% of non-Hispanic whites (n=512,577) and 10.9% of Hispanics (n=108,371) had completed an AD. Among Hispanics, lower acculturation resulted in lower odds of AD completion. Compared to English speakers, Spanish speakers had 50% lower odds of completing an AD (OR=0.5, 95% C.I. 0.4-0.5) while Spanish speakers needing an interpreter had 60% lower odds (OR=0.4, 95% C.I. 0.3-0.4). Additional predictors of successful AD completion were being female, being older, having more comorbidities, more hospital and Emergency Department visits and higher socioeconomic status.
Conclusions: These findings indicate need for more tailored outreach to Hispanics, particularly among less acculturated subgroups, to reduce AD completion disparities.

Cancer

Trends in pediatric cancer mortality and survival in the United States

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Purpose: While pediatric cancer mortality and survival has improved in the United States over the past 40 years, disparities exist by age, race/ethnicity, and cancer type. To assess progress, this study examined recent mortality and survival data for individuals aged <20 years.
Methods: Age-adjusted death rates were calculated using the National Vital Statistics System during 2002-2016. Average annual percent change (AAPC) was calculated using joinpoint regression. Five-year relative survival was calculated using National Program of Cancer Registries data during 2001-2014. Differences in survival were compared using non-overlapping 95% confidence intervals (CI). Death rate and survival were estimated overall and by sex, 5-year age group, race/ethnicity, and cancer type.
Results: Pediatric cancer death rates decreased during 2002-2009 (AAPC=-2.6, 95% CI -3.5–-1.6), but plateaued during 2009-2016 (AAPC=-0.4, 95% CI -1.4-0.6). During 2002-2016, death rates decreased among both sexes, all age groups, whites, blacks, Hispanics, leukemia, and lymphoma, but were unchanged for brain, bone, and soft tissue cancers. Comparing 2001-2007 to 2008-2014, survival improved from 81.8% (95% CI, 81.5-82.1) to 84.8% (95% CI, 84.6-85.1). Survival improved for both sexes, all ages, and whites, blacks, and Hispanics, but was highest in both periods among females, ages 15-19 years, and whites. Survival improved for leukemias, lymphomas, and brain cancers, but not for bone and soft tissue cancers.