

been suicidal and aging has exacerbated the problem. Women are less likely to kill themselves, and the methods differ. We ask are mid and later life women's lethal victimization similar to younger women? What are policy implications for prevention? Our research uses national level data from news surveillance of 728 intimate partner homicide suicide (IPHS) events and the State Firearm Law Database (SFLD) to improve our understanding of violent cause mortality by sex, age, method and location. IPHS patterns show 90% of events used firearm and 90% were male perpetrated. Results of multivariate analyses show young women had greater awareness and fear before IPHS. Evidence finds older men sometimes decided to kill their IP as part of their own suicide, without a history of known domestic violence. Older women have disproportionately low use of shelters, police and protective orders. SFLD shows population adjusted states with more DV firearms laws have significantly fewer IPHS events. Firearm culture has restricted research, blocked law enforcement and has done little to reduce gun access in households with vulnerable populations (e.g., suicidal husbands). Lethality Assessment Protocols could be modified for elder women's unique situation.

SESSION 2370 (POSTER)

EPIDEMIOLOGY

COMPARABILITY OF BIOLOGICAL AGING MEASURES IN THE NATIONAL HEALTH AND NUTRITION EXAMINATION STUDY, 1999-2002

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Biological processes of aging are thought to be modifiable causes of many chronic diseases. Measures of biological aging could provide sensitive endpoints for studies of risk factors hypothesized to shorten healthy lifespan and/or interventions that extend it. However, uncertainty remains about how to measure biological aging and if proposed measures assess the same thing. We tested four proposed measures of biological aging with available data from NHANES 1999-2002: Klemmer-Doubal method (KDM) Biological Age, homeostatic dysregulation, Levine Method (LM) Biological Age, and leukocyte telomere length. All measures of biological aging were correlated with chronological age. KDM Biological Age, homeostatic dysregulation, and LM Biological Age were all significantly associated with each other, but were each not associated with telomere length. NHANES participants with older biological ages performed worse on tests of physical, cognitive, perceptual, and subjective functions known to decline with advancing chronological age and thought to mediate age-related disability. Further, NHANES participants with higher levels of exposure to life-course risk factors were measured as having older biological ages. In both sets of analyses, effect-sizes tended to be larger for KDM Biological Age, homeostatic dysregulation, and LM Biological Age as compared to telomere length. Composite measures combining cellular- and patient-level information tended to have the largest effect-sizes. The cellular-level aging biomarker telomere length may measure different aspects of the aging process

relative to the patient-level physiological measures. Studies aiming to test if risk factors accelerate aging or if interventions may slow aging should not treat proposed measures of biological aging as interchangeable.

TRENDS IN GERIATRIC PHYSICAL ASSAULT INJURIES TREATED IN U.S. EMERGENCY DEPARTMENTS, 2006-2015

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Trends in Geriatric Physical Assault Injuries Treated in US Emergency Departments, 2006-2015 Older adults are common victims of assault, many of which may result in severe injuries. Our objective was to understand temporal and demographic trends in geriatric assault injuries treated at U.S. Emergency Departments (EDs) and to compare these trends to assault injuries in younger adults. We conducted an analysis of assault injuries in patients aged ≥ 60 compared to patients aged 18-59 treated in EDs during 2006-2015 using the National Electronic Injury Surveillance System-All Injury Program Special Study of Assaults, which collects data from a nationally representative stratified probability sample of U.S. hospitals. Total geriatric assaults seen in EDs increased from 35,135 in 2006 to 69,657 in 2015, a 98% increase. These injuries increased as a percentage of all geriatric injuries treated from 0.9% to 1.1%. Assaults in older men increased 119%, while assaults in older women increased 68%. Among age groups, the biggest percentage increases were among adults aged 60-64 (138%) and aged 65-74 (89%). ED visits for injuries associated with physical elder abuse increased from 13,241 in 2006 to 27,406 in 2015, a 107% increase. During this period, number of younger adults treated for assault did not significantly change. We concluded that geriatric assault injuries, particularly in older men in younger age groups, are dramatically increasing. Further research is needed to better understand these assaults to develop prevention strategies.

USE OF EXPOSURE CROSSOVER DESIGN TO CONTROL FOR UNMEASURED BASELINE CONFOUNDING IN OBSERVATIONAL STUDIES

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