Nearly 10,000 adults aged 65 years and older die by suicide in US annually. Although prior studies have linked individual diagnostic factors to late-life suicide risk, to our knowledge none have examined how accumulated health burden affects suicide risk. Such a metric could be studied utilizing a frailty index (FI). Our primary study objective was to determine the relationship of FI to risk of suicide. We examined a longitudinal cohort of 2,858,876 veterans 65 years and older from fiscal year 2012-2013 (baseline) through 12/31/2017, linking the VA's suicide and mortality databases with medical record data. FI was defined by 31 variables, including morbidity, function, cognition, mood, sensory loss, chronic pain, and failure to thrive. We used Fine-Gray proportional hazards regression to examine time to suicide attempt (fatal and non-fatal). Our sample's average age was 75 (SD 8), 88% White, 9% Black, and 98% male. Thirty-seven percent of veterans were non-frail, 30% were pre-frail, 17% mildly frail, 9% moderately frail, and 7% severely frail. Over the course of the study, 9,043 veterans had a documented suicide attempt with >60% fatal. After adjusting for race, gender, region, substance use disorder, and PTSD, risk of suicide attempt increased across frailty categories: Hazard ratios increased from 1.37 (95%CI: 1.30-1.45) for pre-frail individuals to 1.57 (1.43-1.72) for severely frail individuals. We found similar results after further adjustment for the Charlson Comorbidity Index, suggesting cumulative deficit FI may be a strong prognostic marker for risk of suicide in adults over 65; informing late-life suicide prevention efforts.

FRAILTY AND MORTALITY IN A COMMUNITY-DWELLING RELATIVELY HEALTHY OLDER POPULATION

A R M Saifuddin Ekram,[1] Joanne Ryan,[2] Sara Espinoza,[3] Michael Ernst,[4] Anne Murray,[5] and Robyn Woods,[2]
1. Monash University, Monash University, Melbourne, Victoria, Australia, 2. Monash University, Melbourne, Victoria, Australia, 3. University of Texas Health Science Center San Antonio, San Antonio, Texas, United States, 4. University of Iowa, Iowa City, Iowa, United States, 5. Hennepin HealthCare Research Institute, Hennepin HealthCare, Minneapolis, Minnesota, United States

This study examined factors associated with frailty and studied the association between frailty status and mortality in healthy community-dwelling older persons. Participants included 19,114 individuals from the "ASPirin in Reducing Events in the Elderly" (ASPREE) trial. Frailty was defined using modified Fried phenotype comprising exhaustion, body mass index, grip strength, gait speed and physical activity. A deficit accumulation frailty index (FI) using 66 items was also developed. Correlates of frailty were examined using multinomial logistic regression. The association between frailty status at baseline and mortality was analyzed using Cox regression. At baseline, 39.0% (95% CI: 38.3, 39.7) of participants were prefrail, and 2.2% (95% CI: 2.0, 2.4) were frail according to Fried phenotype, while 40.6% (95% CI: 40.0, 41.3) of participants were pre-frail and 8.1% (95% CI: 7.7, 8.5) were frail according to FI. Older age, female sex, lower education, African-American and Hispanic ethno-racial status, smoking, alcohol use, comorbidities, and polypharmacy were associated with frailty status. Pre-frailty

increased risk of all-cause mortality significantly (Fried HR: 1.48; 95% CI: 1.28, 1.71; FI HR: 1.54; 95% CI: 1.31, 1.81); and the risk was even higher for frailty (Fried HR: 2.24; 95% CI: 1.67, 3.00; FI HR: 2.34; 95% CI: 1.83, 2.99) after adjustment for covariates. Cardiovascular disease (CVD) and non-CVD-related mortality showed similar trends. These results highlight a considerable burden of pre-frailty among a large group of community-dwelling, initially healthy older adults. Both Fried phenotype and deficit accumulation FI similarly predicted all-cause, CVD and non-CVD-related mortality in relatively healthy older adults.

IMPACT OF PHYSICAL AND SOCIAL FRAILTY ON THE UTILIZATION OF NURSING CARE SERVICES IN VERY OLD ADULTS

Jaroslava Zimmermann, *University of Cologne, Cologne, Nordrhein-Westfalen, Germany*

Frailty, characterized by increased vulnerability to external stressors, has been found to increase the risk of healthcare utilization and nursing home admission. As the age group of 80 years or older remains frequently underrepresented in previous research, this study examined the impact of physical and social frailty on the utilization of nursing care services in very old population of North Rhine-Westphalia. Using data from a representative cross-sectional study, 1,577 community-dwelling and institutionalized individuals aged ≥80 years were included. Physical frailty was defined according to Fried's criteria (exhaustion, weight loss, low handgrip strength, low physical activity). Social frailty was measured with self-reported loneliness, social isolation, and time spent with others. The use of outpatient care services, day care, informal and in-patient care were considered. Multinomial regression was applied to investigate the impact of physical and social frailty on the use of outpatient and inpatient care services, controlling for relevant sociodemographic and health related characteristics. Compared to very old adults who did not use any care services, no association was found between frailty and the use of outpatient or informal care. Comparing nonusers of care services with institutionalized individuals, nursing home residents were less likely to experience physical frailty and pre-frailty, but were more likely to be socially isolated and to feel lonely. These findings suggest that physical frailty might have been successfully prevented in the context of institutional inpatient care. However, early identification and intervention focused on social inclusion of the institutionalized very old individuals are needed to reverse social frailty.

Session 4555 (Paper)

Friendship in Later Life

AN EVALUATION OF SOCIAL BRIDGING AND BONDING MECHANISMS IN THE ASSOCIATION OF SOCIAL NETWORKS AND COGNITIVE FUNCTION

Siyun Peng,[1] Brea Perry,[1] Adam Roth,[1] Max Coleman,[1] and Hope Sheean,[2] *1. Indiana University, Bloomington, Indiana, United States, 2. Indiana University, Indianapolis, Indiana, United States*

Background and Objectives: Substantial evidence links social connectedness prospectively to cognitive aging

outcomes, but there is little agreement about the social processes or mechanisms that drive this relationship. This study evaluated nine measures of social connectedness, focusing on two distinct forms of social enrichment – access to an expansive and diverse set of loosely connected individuals (i.e., social bridging) and integration in a supportive network of close ties (i.e., social bonding). Research Design and Methods: This study used egocentric social network and clinical cognitive data from 311 older adults in the first wave of the Social Networks in Alzheimer Disease (SNAD) study. Linear regressions adjusting for gender, age, education, and depression symptoms were used to estimate the association between nine measures of social connectedness and global cognitive function, verbal memory, and attention. Results: Measures indicative of social bridging (larger network size, lower density, presence of weak ties, and proportion non-kin) were consistently associated with better cognitive outcomes, while measures of social bonding largely produced null effects. Discussion and Implications: These findings suggest that the protective benefits of social connectedness for cognitive function and memory may operate primarily through a cognitive reserve mechanism that is driven by irregular contact with a larger and more diverse group of peripheral others. Population-level interventions that promote the cultivation of social bridging relationships and activities may have benefits for cognition later in life.

BIG AND MINI: A PROMISING PROGRAM TO LINK GENERATIONS TO COPE WITH SOCIAL ISOLATION

Zhirui Chen,[1] Ling Xu,[1] Noelle Fields,[1] Allen Zhou,[2] Anthony Zhou,[3] and Aditi Merchant,[2] *1. University of Texas at Arlington, Arlington, Texas, United States, 2. The University of Texas at Austin, Austin, Texas, United States, 3. The University of North Texas, Denton, Texas, United States*

Introduction: Social isolation disproportionately affected older adults prior to and especially during the COVID-19 pandemic. To help older adults cope with social isolation, a new program "Big and Mini" was created in April 2020 to link young and older adults together (matched through a custom website developed for this program) and to help increase social connectivity through weekly phone calls. Using a survey with both closed and open questions, this study evaluated participant feedback three months after the program was launched. Methods: 63 Bigs (age 50+) and 53 Minis (age 18+) completed the survey. Stress compared to before COVID-19, social isolation, life satisfaction, intergenerational solidarity, and satisfaction with the program were measured for both the Big and Mini participants. Descriptive, bivariate correlation, group comparison and conventional content analyses were conducted. Results: Results showed that 38.1% of Bigs and 37.7% of Minis felt higher levels of stress than before COVID-19. Both Bigs and Minis had medium levels of social isolation. They also reported high levels of satisfaction with life, satisfaction with the program, and intergenerational solidarity. Content analysis suggested that the reasons to join or expectations of the program were curiosity, friendship, mutually beneficial intergenerational connections, and coping with loneliness. Both Bigs and Minis reported benefits from the learning and sharing opportunities that the program offered. Conclusions: The Big and Mini program offers a promising approach with mutual benefits for both Bigs and Minis. Strategies to improve the program and implications for other phone-based intergenerational programs are presented.

BUILDING FRIENDSHIPS THROUGH VOLUNTEERING IN LATE LIFE: DOES GENDER MODERATE THE RELATIONSHIP?

Emily Lim,[1] Changmin Peng,[1] and Jeffrey Burr,[2] *1. University of Massachusetts Boston, Boston, Massachusetts, United States, 2. McCormack Graduate School, Boston, Massachusetts, United States*

Friendship plays a crucial role in maintaining social connectedness in late life. Volunteering helps older adults to stay socially engaged and often times provides the opportunity to meet and make new friends. A small literature suggests that volunteering may be associated with friendship, but many studies are limited by reliance on small, non-probability samples and simplistic analytic approaches. The literature is also unclear on how volunteering behaviors relate to specific characteristics of friendships and whether there are gender differences that condition these relationships. Using the 2014 and 2018 waves of the Health and Retirement Study (N=1,638), we investigate whether volunteer status and hours volunteered in 2014 are associated with friendship characteristics in 2018 (i.e., number of close friends, friendship quality, and contact frequency) among community-dwelling adults aged 50 years and above (M=65.60 years old, SD=8.31). We also examine whether gender moderated these relationships. Volunteer status and hours in 2014 were positively associated with the number of close friends and contact frequency in 2018. Only those who volunteered 200 hours or more in 2014 were positively associated with friendship quality in 2018. Regarding gender differences, men who volunteered 200 hours or more in 2014 had higher friendship quality in 2018 than women, while women who volunteered 100-199 hours in 2014 had greater contact frequency in 2018 than men. Hence, our results suggest volunteering is integral in shaping late-life friendships and volunteering might be more critical for understanding friendship characteristics among older men and women.

SOCIAL ISOLATION AND SLEEP QUALITY OF OLDER ADULTS IN CHINA: DO FAMILY AND FRIENDSHIP ISOLATION DIFFER?

Dan Zhang,[1] Zhiyong Lin,[2] Feinian Chen,[3] and Shuzhuo Li,[4] *1. Xi'an Jiaotong University, Xi'an, Shaanxi, China (People's Republic), 2. The University of Texas at Austin, Austin, Texas, United States, 3. University of Maryland College Park, University of Maryland, Maryland, United States, 4. Xi'an Jiaotong University, Xi'an, Shaanxi, China (People's Republic)*

This study provides one of the first population-based studies investigating associations between social isolation, especially its two sub-dimensions (family isolation and friendship isolation), and sleep quality among older adults in China. We address three major research questions: 1) Does the risk of poor sleep quality vary by social isolation status? 2) Are the associations between social isolation and sleep quality mediated by mental disorders (depressive symptoms and loneliness) and physical impairments