

DOES PERCEIVED LONELINESS MATTER FOR DIVERSE OLDER MEN AND THEIR PROSTATE-SPECIFIC-ANTIGEN TESTING BEHAVIORS?

Tamara J. Cadet,¹ Shanna L. Burke,² Jamie Mitchell,³ Kyaien Conner,⁴ and Frances Nedjat-Haiem⁵, 1. *Simmons University, Boston, Massachusetts, United States*, 2. *Florida International University, Miami, Florida, United States*, 3. *University of Michigan School of Social Work, Ann Arbor, Michigan, United States*, 4. *University of South Florida, Tampa, Florida, United States*, 5. *New Mexico State University School of Social Work, Las Cruces, New Mexico, United States*

Evidence suggests loneliness is associated with poorer health practices and fewer health promoting behaviors, yet may be associated with greater use of the healthcare system. This dichotomy highlights the lack of understanding in the literature about the relationship between the experience of loneliness in early disease detection behaviors, such as prostate cancer screening and appropriate clinical interventions to support older men. Utilizing a series of logistic regression models, this investigation examined the relationship between loneliness and prostate cancer screening in 2008 and 2012 among White, Black, and non-Hispanic men, ages 50-74 years, (n= 4,875 for 2008 and 7,063 for 2012). The data source as the Health and Retirement Study. Findings indicate that White men were less likely to participate in PSA screening in 2008 if they felt left out or isolated. There was a reduced likelihood of screening among Black men who feel as though they have a lot in common with those around them in 2012. Utilizing approaches such as cognitive-behavioral therapy, motivational interviewing, and solution-focused practice, clinical social workers can have shared decision-making conversations to understand this phenomenon. Clinical social workers have unique training in the person-in-environment model that emphasizes the biological, psychological, social, and spiritual factors that influence behaviors such as cancer screening participation, that can help to understand men's experiences, feelings or needs related to cancer screening participation. Given the lack of focus on men's, this study provides formative data to test interventions to increase the well-being of older men.

RESTING HEART RATE MODERATES THE RELATIONSHIP BETWEEN NEUROPSYCHIATRIC SYMPTOMS, MCI, AND ALZHEIMER'S DISEASE

Shanna L. Burke¹, 1. *Florida International University, Miami, Florida, United States*

Little is known about how resting heart rate moderates the relationship between neuropsychiatric symptoms and cognitive status. This study examined the relative risk of NPS on increasingly severe cognitive statuses and examined the extent to which resting heart rate moderates this relationship. A secondary analysis of the National Alzheimer's Coordinating Center Uniform Data Set was undertaken, using observations from participants with normal cognition at baseline (13,470). The relative risk of diagnosis with a more severe cognitive status at a future visit was examined using log-binomial regression for each neuropsychiatric symptom. The moderating effect of resting heart rate among those who are later diagnosed with mild cognitive

impairment (MCI) or Alzheimer's disease (AD) was assessed. Delusions, hallucinations, agitation, depression, anxiety, elation, apathy, disinhibition, irritability, motor disturbance, nighttime behaviors, and appetite disturbance were all significantly associated ($p < .001$) with an increased risk of AD, and a reduced risk of MCI. Resting heart rate increased the risk of AD but reduced the relative risk of MCI. Depression significantly interacted with resting heart rate to increase the relative risk of MCI (RR: 1.07 (95% CI: 1.00-1.01), $p < .001$), but not AD. Neuropsychiatric symptoms increase the relative risk of AD but not MCI, which may mean that the deleterious effect of NPS is delayed until later and more severe stages of the disease course. Resting heart rate increases the relative risk of MCI among those with depression. Practitioners considering early intervention in neuropsychiatric symptomatology may consider the downstream benefits of treatment considering the long-term effects of NPS.

METABOLITES ASSOCIATED WITH HIGH VERSUS LOW WALKING ABILITY AMONG COMMUNITY-DWELLING OLDER MEN AND WOMEN

Megan M. Marron,¹ Stacy G. Wendell,¹ George C. Tseng,¹ Robert M. Boudreau,¹ Adam J. Santanasto,¹ Clary Clish,² Joseph M. Zmuda,³ and Anne B. Newman¹, 1. *University of Pittsburgh, Pittsburgh, Pennsylvania, United States*, 2. *Broad Institute, Cambridge, Massachusetts, United States*, 3. *Department of Epidemiology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States*

Low walking ability is highly prevalent with advanced age and associated with a higher risk of major adverse health outcomes. Metabolomics may help better characterize differences among older adults with vastly different walking abilities and provide insight into altered metabolic processes underlying age-related declines in physical functioning. Here, we sought to identify metabolites associated with high versus low walking ability using a nested case-control study of 120 community-dwelling adults ages 79-95 (40% men, 10% black) from the Cardiovascular Health Study (CHS) All Stars study. Participants with high versus low walking ability were matched one-to-one on age, gender, race, and fasting time. Using liquid chromatography-mass spectrometry, 569 metabolites were identified in overnight-fasting plasma. High versus low walking ability was defined as the best versus worst tertile of gait speed (≥ 0.9 versus < 0.7 meters/second) and Walking Ability Index scores (7-9 versus 0-1). Ninety-six metabolites were associated with walking ability extremes ($p < 0.05$, false discovery rate $< 30\%$), where 24% were triacylglycerols. Triacylglycerols containing mostly polyunsaturated fatty acids (e.g., omega-3) were higher, whereas those containing mostly saturated/mono-unsaturated fatty acids were lower among those with high versus low walking ability. Arginine and proline metabolism was a top pathway identified. Body mass index partly explained the association between a subset of metabolites and walking ability extremes. These findings may partly reflect pathways implicating modifiable risk factors including excess dietary lipids and lack of physical activity, which contribute to obesity and cause further alterations in metabolic pathways, potentially leading to age-related declines in walking ability in this cohort.