

We measured pain intensity (0-10) pre/ante/post multiple performance-based functional activities; we report preliminary results for 7-meter GAITRite® walk and Stair climbs. Pain intensity was higher before and after the 7-meter walk and stair climbs in AAs, although not significantly different than WAs. We will conduct additional statistical tests for the remaining functional activities to identify potential differences and ethnic-specific factors that distinguish movement-evoked pain and function by race.

CAREGIVING, PAIN, AND DEMENTIA: EVALUATING THE ROLE OF COPING AND ADAPTATION

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Pain is a stressor that can negatively influence quality of life for caregivers. Dementia caregivers have an increased risk for stress-related health outcomes including death. Few studies have examined the relationships between pain and coping-related outcomes for dementia caregivers. In the present study, Black family caregivers (n=56) completed a survey inclusive multiple health and coping measures. In addition to descriptive statistics, Pearson's correlation coefficients were completed. 33% of caregivers experienced moderate to severe pain. The majority of participants with pain (72%) also had hypertension and were obese (69%). Pain intensity was significantly correlated with anxiety (p=.001). Effective coping and adaptation was correlated with perceived social support (p=.002) and perceived positive aspects of caregiving (p=.027). The primary coping strategies used by caregivers with chronic pain included spiritual coping, information gathering, reliance on past experiences, and maximizing resource use. Improving pain outcomes for caregivers may benefit both caregivers and persons with dementia.

UNCOVERING THE INFLUENCE OF PSYCHOSOCIAL FACTORS ON PAIN-RELATED BRAIN RESPONSES IN OLDER ADULTS WITH CHRONIC PAIN

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Psychosocial factors such as experiences of discrimination, pain catastrophizing and perceived stress are associated with poor osteoarthritis-related pain and disability outcomes across sex and ethnic/race groups. However, the mechanisms that mediate these psychosocial factors and knee osteoarthritis outcomes across race and sex are unclear. A cross-sectional correlational design identified the associations between everyday discrimination and clinical pain, disability and functional performance among 188 non-Hispanic Black (NHB) and non-Hispanic White (NHW) persons with knee osteoarthritis. In a serial mediated model, perceived stress and pain catastrophizing mediated the relationship between discrimination and osteoarthritis-related outcome variables in female participants. Using magnetic resonance imaging, findings suggest that experiences of discrimination

differentially affect structural brain regions based on both race/ethnicity and sex in older adults with knee osteoarthritis. Given this, we are also currently investigating the extent to which pain catastrophizing on pain-related brain structure differs across race/ethnic groups in older adults with knee osteoarthritis.

AVPR1A AND STRESS IN ADULTS WITH SICKLE CELL DISEASE-RELATED CHRONIC PAIN

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Purpose: Emotional stress is a known pain trigger in patients with sickle cell disease (SCD). The Arginine vasopressin receptor 1A gene (AVPR1A), SNP rs10877969, is associated with acute pain and stress-related pain. Our study investigated the association between AVPR1A genotype with stress and age in adults with SCD pain. Methods: 169 participants with SCD and chronic pain (100% African descent; mean age 36.4 ± 11.6 years [range =18-74 years]) completed the Perceived Stress Questionnaire. The SNP was evaluated as the imputed score was R²>0.8. ANOVA compared stress by genotype and age. Findings: Mean stress scores were significantly lower (p<0.05) for the older adults (0.35 ± 0.18) than the younger adults (0.41 ± 0.17). Mean stress scores were not significantly different by genotype for younger or older adults. Discussion: The rs10877969 genotype frequency was not different by age. In contrast to prior research, there was no association between genotype and stress.

CORRELATES OF PAIN, OPIOID USE, AND PSYCHOTROPIC MEDICATIONS AMONG OLDER AFRICAN AMERICANS

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Unrecognized and undertreated pain among older African Americans (AAs) is well-documented. This study explored the link between social, behavioral, and health correlates of pain and psychotropic as well as opioid-based medications in a sample of underserved 740 AA older adults. Almost 16% and 17% of participants used at least one psychotropic and opioid-based medications, respectively. Of those who use opioid-based medications, 73% used opioids only, 28% used opioids and at least one psychotropic medication. Use of opioid or psychotropic medications were associated with increased polypharmacy. Multivariate analysis showed different types of pain are predictors of opioid use, however, depressive symptoms and level of pain were associated with use of psychotropic medication. Moreover, the relationship of pain and psychotropic medications warrants more study due to emerging mental health crisis. These findings underscore the need for optimal concurrent management of pain and mental health for older AAs with potential inappropriate medication use.