

the work of the Council at the forefront of this international effort to translate advancements in brain health research to the wider public, with an emphasis on individuals aged 50 and older.

GLOBAL COUNCIL ON BRAIN HEALTH: CONSENSUS AND RECOMMENDATIONS FOR PROMOTING BRAIN HEALTH THROUGH MUSIC ENGAGEMENT

Jacobo Mintzer, *Roper St. Francis Healthcare, Charleston, South Carolina, United States*

This presentation will summarize the points of consensus reached by the experts and describes the major points of discussion that led to their recommendations for men and women age 50 and older. The GCBH considered questions surrounding what happens in the brain when listening to music as well as creating music. Topics such as music therapy and the clinical dimensions of introducing music into caring for patients will be addressed. Alongside the consensus points, recommendations and practical tips will be presented. Moreover, we will also identify gaps in our knowledge that currently exist in the evidence base surrounding music and brain health.

THE EFFECT OF MUSIC THERAPY ON COGNITIVE FUNCTIONING AMONG OLDER ADULTS

Kuei-Min Chen, *Kaohsiung Medical University, Kaohsiung City, Taiwan (Republic of China)*

Music creates and fosters connection and interrelationships between individuals and encourages social interaction. Indeed, community-based interventions are a powerful way to engage older people. This presentation will provide an overview of music therapy and the impact it can have on the cognitive functioning of older people. Examples of music therapy interventions in the community can be found in nursing homes, hospitals, or communities. Differences in receptive (passive) music therapy and active music therapy will be discussed along with the impact these therapies may have on individuals experiencing cognitive decline. Moreover, studies of music therapy combined with other activities, such as exercise or art will be discussed. This research will be presented within the context of the recommendations put forth by the Global Council on Brain Health aimed at adults aged 50+.

BENEFITS OF THE UNFORGETTABLES: A CHORUS FOR PEOPLE WITH DEMENTIA TOGETHER WITH THEIR FAMILY CAREGIVERS

Mary Mittelman, *NYU School of Medicine, New York, New York, United States*

The Unforgettables was founded in 2011 for people with dementia and their family caregivers. We hypothesized that singing and rehearsing together would provide an opportunity for people in the early and moderate stages of dementia and their family caregivers to share a normative, stimulating and social activity. Pilot study results showed that quality of life and communication with the other member of the dyad improved for people with dementia; quality of life and, social support, communication and self-esteem improved for caregivers. Moreover, people with dementia learn new songs for every performance, suggesting that this activity may slow cognitive decline. The chorus continues to rehearse and

perform, and now has approximately 100 members in two locations in NYC. These findings support the recommendations of the Global Council on Brain Health by underscoring the many benefits of music performance in enhancing social engagement and providing joy to participants and the community.

SESSION 7175 (SYMPOSIUM)

NEW EVIDENCE ON THE BIOBEHAVIORAL MECHANISMS OF CHRONIC PAIN IN AGING AFRICAN AMERICANS

Chair: Staja Booker

African American older adults are living longer with chronic pain, which presents a huge personal and societal burden. A growing group of scholars are now devoted to accurately and precisely characterizing and phenotyping the experience of pain in aging using within-group and advanced methodological designs to elucidate the biopsychosocial-behavioral responses to pain. In this symposium, five dynamic presenters present new evidence on mechanisms of pain in older African-Americans. Dr. Roach's investigation reveals the effect of genetic alterations of sickle cell disease (SCD) on stress-related pain in younger and older adults; this scientific inquiry is especially important because there is little research on SCD in aging. Next, Dr. Terry, extends these findings by exploring the association between psychosocial factors such as experiences of discrimination, pain catastrophizing, and perceived stress on neural (brain) responses via magnetic resonance imaging. From a clinical perspective, Dr. Booker reports on the first-ever model of intra-racial differences in movement-evoked pain in older African-Americans with knee osteoarthritis and healthy controls. Our final two presenters use a translational approach to identify how older African-Americans cope with chronic pain. Dr. Robinson-Lane's study highlights the unique experience and predictors of coping, adaptation, and self-management of chronic pain in Black dementia caregivers. Finally, Dr. Cobb's research from a large cross-sectional study correlates social, behavioral, and health factors with opioid and psychotropic use in economically disadvantaged older African-Americans. This symposium offers novel ways of understanding social determinants of pain and assisting African-Americans and their caregivers to manage complex chronic pain in later life.

A PRELIMINARY MEASUREMENT AND UNDERSTANDING OF MOVEMENT-EVOKED PAIN IN AFRICAN AMERICAN ELDER ADULTS

Staja Booker, *The University of Florida, Gainesville, Florida, United States*

Osteoarthritis (OA) is a principal cause of disabling knee pain, and movement is a known exacerbator of pain in African Americans (AAs). Still, research has neglected to understand the relationship between pain with movement and its impact on function and mobility. Our previous study found significantly higher movement-evoked pain between AAs and White American (WAs). Therefore, this case-control observational study investigated inter-racial and intra-racial differences in movement-evoked pain in AAs and WAs (N=28) who were 55-78 years-of-age (M= 65.75, SD= 6.23).

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

Sheria Robinson-Lane, and Xingyu Zhang, *University of Michigan, Ann Arbor, Michigan, United States*

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

Ellen Terry,¹ Staja Booker,² Keesha Roach,¹ Sharon Cobb,³ and Sheria Robinson-Lane,⁴ 1. *University of Florida, Gainesville, Florida, United States*, 2. *The University of Florida, Gainesville, Florida, United States*, 3. *Charles R. Drew University of Medicine & Science, Los Angeles, California, United States*, 4. *University of Michigan, Ann Arbor, Michigan, United States*

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

Keesha Roach,¹ Brenda Dyal,¹ Srikar Chamala,¹ Yingwei Yao,¹ Roger Fillingim,² Zajie Wang,³ Robert Molokie,³ and Diana Wilkie,¹ 1. *University of Florida, Gainesville, Florida, United States*, 2. *University of Florida, Pain Research and Intervention Center of Excellence, Gainesville, Florida, United States*, 3. *University of Illinois at Chicago, Chicago, Illinois, United States*

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

Sharon Cobb, Mohsen Bazargan, and Shervin Assari, *Charles R. Drew University of Medicine & Science, Los Angeles, California, United States*

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.