

### CHANGE IN DEMENTIA FAMILY CAREGIVERS' WILLINGNESS TO PAY FOR A NONPHARMACOLOGIC INTERVENTION

Eric Jutkowitz,<sup>1</sup> Daniel Scerpella,<sup>2</sup> Katherine Prioli,<sup>3</sup> Katherine Marx,<sup>2</sup> Laura N. Gitlin,<sup>4</sup> Laura Pizzi,<sup>3</sup> and Jonah Popp<sup>1</sup>, 1. *Brown University, Providence, Rhode Island, United States*, 2. *Johns Hopkins University, Baltimore, Maryland, United States*, 3. *Rutgers University, Piscataway, Maryland, United States*, 4. *Drexel University, Philadelphia, Pennsylvania, United States*

Family caregivers provide a majority of care for persons with dementia (PwD); however, little is known about caregiver's willingness to pay (WTP) for an intervention to help them manage dementia symptoms. To fill this gap, caregiver/PwD dyads (n=223) were recruited to participate in a randomized trial evaluating tailored activities to minimize behavioral symptoms and functional decline. At baseline and 6-months caregivers were asked their WTP per session for the 8-session 3-month program compared to caregiver education/support only. At baseline, treatment caregivers were WTP \$26.20, which was \$11.50 (95%CI: -\$12.70, -\$10.3) less per session compared to control group caregivers WTP \$37.30. At 6-months, treatment caregivers were WTP \$22.90 and control caregivers \$27.30. From baseline to 6-months, a change in WTP was \$7.00 (95%CI: \$5.80, \$8.30) greater than the change in WTP for control group caregivers. Caregivers WTP slightly decreases over time in both groups but decrease is less for TAP following program participation.

## SESSION 2495 (PAPER)

### IMPACT OF VISION AND HEARING IMPAIRMENTS

#### A MODEL OF CARE FOR OLDER ADULTS WITH IMPAIRED VISION OR BLINDNESS AT THE END OF LIFE

Ximena Morales,<sup>1</sup> Ricardo Blondet,<sup>2</sup> Marcos Milanez,<sup>2</sup> Deepak Mandi,<sup>2</sup> Gabino Lares,<sup>2</sup> and Michael A. Silverman<sup>2</sup>, 1. *Trustbridge Hospice, West Palm Beach, Florida, United States*, 2. *West Palm Beach VA Medical Center, West Palm Beach, Florida, United States*

Our objectives were to describe unique challenges of visually-impaired patients receiving end-of-life institutional care and to propose a model for the comprehensive care of the vision-impaired patients incorporating bedside techniques and advanced assistive technology. The prevalence of visual impairment in long-term care is increasing. Collaborating with our Blind Rehabilitation Center, we have summarized a care model including the identification of patients who have impaired vision and adjustments of daily routine. Care was consistently provided by staff with voices familiar to patients. Staff is trained to introduced themselves clearly by voice when entering the room. Patients engage in hobbies that are less dependent on vision, such as music therapy. Safety measures are taken to facilitate mobility. We describe the case of a 90-year-old WWII Veteran with dementia and dysphagia who was legally blind and required extensive assistance with his ADLs. Although initially calm, the patient eventually became delirious, reliving his time as a gunner in the Navy and believing he was firing on Japanese Kamikaze planes. After his visual impairment was addressed using the approach described

*GSA 2019 Annual Scientific Meeting*

above, the patient became calmer. Listening to his wife's voice and enjoying his favorite gospel music helped him cope better with the situation until he died peacefully on hospice care. In conclusion, a model of care considering visual impairment was effective at alleviating distress. More emphasis needs to be placed on evaluating and managing sensory impairment when providing care for older adults approaching the end of life.

#### HEARING IMPAIRMENT, COGNITIVE PERFORMANCE, AND BETA-AMYLOID DEPOSITION IN THE ARIC-PET AMYLOID IMAGING STUDY

Jennifer A. Deal,<sup>1</sup> Andreea Rawlings,<sup>2</sup> A. Richey Sharrett,<sup>3</sup> Nicholas Reed,<sup>3</sup> Joshua Betz,<sup>3</sup> Thomas Mosley,<sup>4</sup> Frank Lin,<sup>3</sup> and Rebecca Gottesman<sup>3</sup>, 1. *Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, United States*, 2. *Kaiser Permanente Center for Health Research, Portland, Oregon, United States*, 3. *Johns Hopkins University, Baltimore, Maryland, United States*, 4. *University of Mississippi Medical Center MIND Center, Jackson, Mississippi, United States*

Hearing impairment is a risk factor for dementia but the mechanism underlying this association is unknown. We investigated the relationship between hearing and cognitive performance and brain  $\beta$ -amyloid deposition in 252 adults aged 67-88 years (37% black race) without dementia from three U.S. communities. Global cortical standardized uptake value ratios (SUVRs) were calculated from florbetapir-positron emission tomography scans, with elevated SUVR defined as  $>1.2$  (the median value). Air conduction hearing threshold levels for the frequencies of 0.5, 1, 2 and 4 kHz were obtained by pure tone audiometry and averaged for the better-hearing ear to yield a pure tone average (PTA) in decibels hearing level (dB). A composite cognitive score was created from ten neuropsychological tests summarized using latent variable methods. Multivariable-adjusted linear and Poisson regression with robust standard errors were used to estimate the average difference in cognitive scores and prevalence of elevated SUVR, respectively, by hearing impairment status. In analyses adjusted for age, sex, education and APOE  $\epsilon 4$  status, hearing was not associated with elevated SUVR [prevalence ratio per 10 db increase (worse hearing) = 0.94 (95% CI: 0.84, 1.04)]. Results did not differ by race. In contrast, each 10 db increase in hearing impairment was associated with 0.08 standard deviation (95% CI: 0.02, 0.15) lower cognitive score, after adjustment for demographic and cardiovascular factors. Poorer hearing is associated with poorer cognitive performance but not with amyloid deposition, suggesting that the mechanism underlying the relationship between hearing and cognition may be independent of Alzheimer's-related pathologic brain changes.

#### SELF-REPORTED VISION IMPAIRMENT AND SUBJECTIVE WELL-BEING IN OLDER ADULTS: A LONGITUDINAL MEDIATION ANALYSIS

Joshua R. Ehrlich,<sup>1</sup> Xiaoling Xiang,<sup>1</sup> Khushali Shah,<sup>2</sup> Rita X. Hu,<sup>3</sup> Brian C. Stagg,<sup>4</sup> and Vicki A. Freedman<sup>1</sup>, 1. *University of Michigan, Ann Arbor, Michigan, United States*, 2. *University of Miami, Miami, Florida, United States*, 3. *University of Michigan, Ann Arbor, Michigan, United States*, 4. *Duke University, Durham, North Carolina, United States*