

who developed dementia were identified using all-cause dementia ICD-9/10 codes documented on two separate visits starting one year after the PSG study until the end of 2019 in a 1-year sliding period ($n=1,534$). Using the first appearance of ICD-9/10 code as dementia onset time, patients were clustered into 3 groups of early-, mid-, and late time to develop dementia (mean = 2.7, 7.5, 12.8 years, respectively). Natural language processing was used to extract sleep efficiency (SE) and sleep onset latency (SOL). Univariate analysis was used to compare the groups. After adjusting for age, SE was significantly higher in the late (76%) vs early (69%) group and SOL was significantly shorter in late (21m) versus early (33m) group. SE was higher and SOL was shorter in patients who developed dementia later compared to those who developed dementia earlier. Greater sleep continuity in late dementia onset group suggests that sleep may be a modifiable risk factor that could potentially delay the onset of dementia.

THE IMPACT OF SLEEP DISTURBANCE ON REGIONAL BRAIN VOLUMES

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Sleep disruption has been associated with increased beta-amyloid deposition and greater risk for later development of Alzheimer's disease. Studies indicate that sleep disturbance correlates with regional brain volumes, but data are limited. We sought to determine the effect of sleep disturbance on regional brain volumes by cognitive and apolipoprotein e (APOE) e4 status. We conducted a secondary analysis of the National Alzheimer's Coordinating Center (NACC) Uniform Data Set using complete structural imaging data from 1,371 participants (mean age: 70.5; SD: 11.7). Multiple linear regression was used to estimate the adjusted effect of sleep disturbance (via Neuropsychiatric Inventory Questionnaire) on regional brain volumes through measurement of 30 structural MRI biomarkers. Sleep disruption was associated with greater volumes in the right and left lateral ventricles and greater volume of total white matter hyperintensities ($p<.05$). Lower mean volumes in total brain, total gray matter, and total cerebrum grey matter volumes, and in 12 hippocampal, frontal, parietal, and temporal lobe volumes were observed among participants who reported sleep disturbance. Males, Hispanic participants, and those with less education were more likely to report sleep disruption. Cognitive status moderated the relationship between sleep disturbance and lateral ventricular volumes, while APOE e4 moderated the effect between sleep disturbance and parietal lobe volumes. These findings suggest that disrupted sleep is associated with atrophy across multiple brain regions and ventricular hydrocephalus ex vacuo, after controlling for intracranial volume and demographic covariates. The influence of cognition and APOE e4 status indicates that this relationship is affected by co-occurring physiological processes.

SESSION 2988 (PAPER)

HEALTH, WELLNESS, AND SUCCESSFUL AGING

FRIENDSHIPS FORGED IN FITNESS: AN ETHNOGRAPHIC EXPLORATION OF OLDER WOMEN'S SOCIAL EXPERIENCES IN WATER AEROBICS

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Research shows that participants, especially older women, are more likely to adhere to a fitness program when they have social supports. Gerontology research also demonstrates that the social relationships forged by older women at community and fitness centers can be long-lasting and provide a variety of supportive functions. Older adults respond well to pool- or water-based aerobic exercises that are safe on the joints and provide a comfortable environment away from the intimidating nature of the gym. Therefore, water-based classes provided at community fitness centers are well positioned to provide ample social opportunities to further reinforce continued physical activity for older women, resulting in health and quality-of-life improvements. This project is a 5-month ethnographic exploration of the social relationships created and maintained in the context of water-based fitness classes (water aerobics) at a local community center (YMCA) that is attended by a culturally diverse group of older adults. The friendships forged by women in the pool at the YMCA provide a variety of social supports that help to maintain healthy aging outcomes among participants. Drawing on components of Activity Theory and Social Support Theory, this presentation utilizes participant observation, semi-structured interviews, and questionnaires ($N=35$) to provide an anthropological "thick description" of the important role that fitness center friendships can form in the social lives of older women in the U.S.

GEROTRASCENDENCE AS A FACTOR OF ACTIVE AGING: PREDICTORS AND OUTCOMES

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The image of modern aging had changed. While before ageing was associated with degenerative processes, today more older adults become active and meaningful members of the society. Still more knowledge is needed to help the majority of older adults to age in active and positive way. Solid body of research shows that in ageing the value of subjective factors dramatically increases. Gerotranscendence that suggests important positive personality changes to occur in aging, could be one of such mechanisms. The aim of the present study was to investigate which psychological characteristics were important for development of gerotranscendence and which positive outcomes it might cause. Participants were 200 older adults aged 60-89 (69% females). Methods: Gerotranscendence scale (Strizhitskaya), self-actualization test (Shostrom), Self-acceptance test (Pantileev), Psychological well-being scale (Ryff), Scale of social activity