

Caring for a person with Alzheimer's disease and related dementias (ADRD) can be stressful. Support programs are available for caregivers, but distance and cost present barriers to participation. Our mixed-methods study explored consumer acceptability and preliminary efficacy of a telehealth-based caregiver intervention, Tele-STAR. Caregivers in Tele-STAR met one-to-one with a consultant over eight weeks, via video conferencing, to address behavioral symptoms of dementia. We measured the effect of the intervention on caregiver reactivity to behavioral symptoms. Focus groups were used to assess acceptability. The literature suggests that stressed caregivers drop out of support programs. Thus, in the focus groups we asked about preference for intervention mode (one-to-one versus group). We hypothesized that more stressed caregivers would prefer the one-to-one mode. Data were analyzed using paired t-tests for the quantitative data, and a phenomenological lens for the qualitative data. Of the thirteen enrolled caregivers, twelve completed the study. Significant improvement was found in caregiver reactivity ( $p=0.001$ ). Twelve caregivers participated in focus groups, in which they reported that the intervention helpful and they valued the therapeutic relationships with the consultants. Few had difficulty with the technological interface. Most liked the one-to-one mode of the intervention, but were open to a hypothetical group-based option. However, more stressed caregivers preferred a one-to-one intervention over a group intervention ( $p=0.06$ ). While one-to-one interventions tend to be preferred by caregivers, they are expensive. Our findings suggest that one-to-one telehealth-based interventions should be reserved for more stressed caregivers who need intensive support with managing behavioral symptoms of dementia.

#### EDUCATIONAL OUTREACH IN ALZHEIMER'S DISEASE AMONG OLDER AFRICAN AMERICANS

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Alzheimer's disease (AD) is a growing public health problem that continues to disproportionately impact African Americans. African Americans are twice as likely to be afflicted with AD compared to non-Latino Whites. However, continued lack of inclusion of African Americans in clinical research trials may reduce the generalizability of future treatments. We investigated how culturally tailored prevention education impacted knowledge, attitudes, and beliefs of AD among older African Americans. We also assessed how culturally tailored prevention education impacted participation in clinical research trials among older African Americans. Researchers delivered "Aging with Grace," a culturally tailored dementia program to community and faith-based organizations. Demographic information, knowledge of AD, and beliefs of clinical research trials were collected using pre- and post-surveys. In addition, information from community members interested in enrolling in a clinical research study was acquired. A total of 66 community members attended

"Aging with Grace" from March to August 2019. 32% of participants perceived an increase in AD knowledge. Most participants (89.1%) believed that more African Americans should participate in research and 29 (44%) expressed interest in enrolling in clinical trials (observational – 73.2%, prevention – 68.2%, treatment – 24.4%). Most participants (93.1%) rated the presentation highly informative and 78% reported that the presentation was very applicable to their daily life. Overall knowledge of AD and interest in participating clinical trials improved with culturally tailored education. Future research should explore ways of enhancing knowledge and participation to enhance inclusion in prevention and treatment trials.

#### THE INTERNET IS A BOY'S CLUB?: ANALYZING GENDER DIFFERENCES IN COMPUTER & INTERNET ADOPTION BY OLDER ADULTS

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The realization of technology's exponential advancement has been noted in recent years. With ever advancing technologies becoming more integrated in our everyday lives, we must adapt and learn to utilize these new technologies in order to maintain a presence in society. One group that has been stereotyped as struggling to adopt and learn the processes involved with advancing technologies is that of the older adult population. However, previous literature tends to suggest that there are also gendered differences in the adoption of different forms of modern and advancing technologies among older adults. While some articles state that older adult women have been reported to use social media than their male counterparts, conflicting previous literature states that older adult women use newer technologies less, but are more creative in their uses. With these conflicting reports, there comes a need for proper analyses on the gendered use of modern technology among older adults. Using data from the 2015 Current Population Survey (CPS) Computer and Internet Use Supplement, different demographic factors are analyzed for influences on use of technologies. The older adult age cohorts analyzed include the Baby Boomer and the Silent Generation age cohorts. This analysis includes of controlling for additional factors such as regional residence, educational attainment, and other social location variables. Contrary to much of the existing literature, there is little difference in the adoption of computer and internet technologies by older adults. Additionally, the analyses are performed on the Generation X and Millennial age cohorts for comparison.

#### SOCIAL ISOLATION AND COGNITIVE FUNCTIONING AMONG OLDER JAPANESE ADULTS

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This research aimed to assess the relationship between social isolation and cognitive functioning among older Japanese adults, thereby expanding the relevant literature in two main ways. First, we estimated a social isolation score to incorporate objective measurements of social isolation into a subjective measurement. Second, a panel data analysis was

utilised to consider the change in the social isolation score and time-invariant unobserved heterogeneity. Data were derived from the National Survey of the Japanese Elderly, a survey of a sample of older Japanese adults aged 60 to 99 in waves 3 through 7, which contain unified information of social isolation. The sample included 4,889 observations (1,836 individuals) for men and 6,621 observations (2,433 individuals) for women. The predicted isolation score was obtained by a random-effects ordered logistic regression (i.e., regressing a subjective feeling of isolation on variables regarding social interaction, social support, and social engagement). The association of cognitive functioning with the isolation score was estimated by a fixed-effects ordinary least squares regression, controlling for age, socioeconomic variables, health conditions, and time fixed-effects. We found that increased isolation was associated with a deterioration in cognitive functioning, both for men (coefficient: 0.66, robust standard error [SE]: 0.30) and women (coefficient: 0.90, SE: 0.26). Findings of this research highlight the importance of actions aimed at inhibiting social isolation for the prevention of cognitive decline. This approach is potentially beneficial for developing measurements of both subjective and objective social isolation and estimating the longitudinal relationship between social isolation and cognitive functioning.

#### INEQUALITY IN COMMUNITY HEALTH SERVICES USE IN ISRAEL: A COMPARISON BETWEEN ELDER JEWS AND ARABS

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Population aging is an important social and public health issue globally. However, increase in longevity causes physical frailty and disability for many elders, which might lead to independence loss and impact quality of life. This increases health services usage and leads to higher costs of medical treatments. Data show that higher socio-economic status and accessibility to health services might reduce inequality in service use and impact mortality rates and quality of life. Also, that improved socio-economic status and population accessibility to Health services may stem from inner health system factors, as well as those related to the patients. Among minorities lower usage of formal professional services, including health services, are often related to cultural differences and many times to lower technological level, which are not considered by service providing organizations. Thus, lack of attention to service using minorities' needs may cause a gap between potential consumers to services use. Israel is a multi-cultural society with mixed population of Jews and Arabs. Currently, Arabs comprise 20.9% and Jews 74.3%. However, the rate of disabled Jews is 16% compared to 31% among older Arabs.

#### SERUM 25(OH)D SIGNIFICANTLY IMPACTS ALZHEIMER'S DISEASE IN OLDER ADULTS LIVING IN LONG-TERM CARE COMMUNITIES.

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6.08 million Americans suffer from Alzheimer's Disease (AD), with some estimating diagnoses will reach 15.0 million by 2060. Age is the strongest risk factor for AD, and the prevalence of AD among older adults necessitates investigation into preventable risk factors. 25-hydroxyvitamin D [25(OH)D] deficiency is more prevalent in older adults than other age demographics. Research shows a strong correlation between deficient 25(OH)D serum levels ( $\leq 20$  ng/ml) and AD diagnosis. The association with insufficient ( $\leq 30$  ng/ml) levels remains unclear. Older adults (age > 65 yo) of five LTC communities in Texas participated in the cross-sectional study. One-year medical history and demographics were abstracted from medical records using double-blinded data abstraction and entry. Blood draws measured 25(OH)D serum levels. Adjusted logistic regression models examined if insufficient 25(OH)D serum levels ( $\leq 30$  ng/ml) are associated with AD diagnosis. Confounders were total daily vitamin D supplementation, BMI, race, gender, age, years in community, and diagnosis of liver and renal disease. Participants (n=174, mean age: 83 yo) consisted of 63% female and 89% Caucasian. Fifty five percent had insufficient serum 25(OH)D levels (mean level: 32.6 ng/ml; mean supplementation rate: 1,138 IU per/d), and 20% had diagnosis of AD. 25% had both insufficient serum levels and AD, while 12.6% had adequate serum levels and AD. Those with insufficient 25(OH)D serum levels had elevated odds (OR=2.8; CL: 1.14, 7.02; p=0.024) of having AD after adjusting for confounders. Insufficient serum 25(OH)D levels ( $\leq 30$  ng/ml) are associated with increased diagnoses of AD, indicating the importance of adequate levels among LTC residents.

#### DIFFERENTIAL EFFECTS OF STATINS ON COGNITION IN WOMEN AT RISK FOR ALZHEIMER'S DISEASE

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It is well established that the apolipoprotein epsilon 4 allele (APOE4) and being female are risk factors for late onset Alzheimer's disease (AD) and declines in verbal learning and memory are early cognitive symptoms of conversion to AD. Because of conflicting findings regarding the effects of statins on cognition, this study examined statin use with respect to verbal learning and memory by APOE4 status in a sample of cognitively unimpaired women at risk for AD. Neuropsychological, statin use, and APOE4 data were utilized as a secondary analysis from an ongoing longitudinal study at the Banner Alzheimer's Institute in Arizona. Subjects were cognitively unimpaired women aged 47-75 with a family history of probable AD in at least one first-degree relative. Neuropsychological outcome variables included total learning, immediate memory, and delayed memory scores from the Rey Auditory Verbal Learning Test (RAVLT). Statin use was defined by use of a cholesterol lowering drug at study enrollment. APOE4 status was defined by presence of at least one APOE4 allele. Linear regression analyses