that cognitive processes such as attention and executive function have a significant impact on gait function in older adults. However, the exact neural mechanisms underlying difficulties in the control of mobility in older adults remains an open question. We examine the changes in the executive control of mobility in older adults with mobility impairments using functional near-infrared spectroscopy, as operationalized by performance in the community balance and mobility scale (CB&M). We hypothesized that prefrontal cortical (PFC) activity increases would be higher in older adults with mobility impairments, compared with older adults without mobility impairment, as dual-task walking difficulty increased. Older adults with (n=10, mean±SD age: 77±8 years, 8 females, CB&M= 58±12) and without mobility impairment (n=14, mean±SD age: 63±9 years, 11 females, CB&M= 87±6) were recruited from the local community. Dual-task walking was performed at a comfortable pace, while the difficulty of the concurrent cognitive task was increased using the modified Stroop test. PFC activity was measured using measures of oxygenated hemoglobin across the PFC. Older adults with mobility impairments demonstrated disproportionate increases in PFC activity, in comparison to those without mobility impairments, as the difficulty of the concurrent cognitive task increased (P<.001), even after controlling for age. In conclusion, these data suggest that older adults with mobility impairments may require greater attentional resources than those without mobility impairments when concurrently performing thinking and walking tasks.

TARGETED TRANSCRANIAL DIRECT CURRENT STIMULATION IMPROVES DUAL-TASK WALKING PERFORMANCE IN OLDER ADULTS

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In older adults, the ability to walk while engaged in an unrelated cognitive task (i.e., dual tasking) depends upon activation of both motor and cognitive brain networks. Noninvasive transcranial direct current stimulation (tDCS) can facilitate the excitability of specific brain regions and their connected neural networks. In this multi-site, randomized controlled within-subject cross-over study, we tested the effects of single, 20-minute sessions of tDCS targeting 1) the primary motor cortex (M1), 2) the left dorsolateral prefrontal cortex (dlPFC, a primary region subserving cognitive function), 3) both M1 and left dlPFC, or 4) neither region (sham). Forty-eight older adults free of overt illness or disease (mean±SD age=75±6 years, 35 women) completed four study visits at least 72 hours apart, during which dual task gait was assessed before and after tDCS administration. Stimulation was delivered using the Starstim™ system (Neuroelectrics Corp) and the same array of six gel electrodes to ensure double-blinding. Participants were successfully blinded to tDCS condition and reported no unexpected tDCS side effects. Repeated-measures ANOVAs adjusted for age and sex revealed that the dual task cost to gait speed was smaller (i.e., better and closer to zero) following tDCS that targeted both M1 and the left dlPFC, as well as the left dlPFC alone, compared to all other time points (condition-time interaction: F=3.0, p=0.04). The dual task costs following these two types of stimulation were similar. These results suggest that noninvasive facilitation of cognitive-motor brain network excitability leads to acute improvement in dual task performance in older adults.

TRANSITIONING HOME AFTER STROKE: IMPROVING PHYSICAL HEALTH AND PATIENT ACTIVATION

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While the majority of stroke patients will return home after being hospitalized, this transition is physically and emotionally challenging. We developed a social work based case management program to address these challenges. The Michigan Stroke Transitions Trial (MISTT), a pragmatic 3-arm clinical trial tested the effects of the case management program on its own and combined with technology against usual care in patients recovering from stroke. Patients from three Michigan hospitals were randomized to one of three groups upon discharge to home. The two treatment groups received services from a social work case manager via home visit and telephone. One treatment group also was given training and access to a curated stroke website developed for MISTT. The intervention lasted up to 90 days and data was collected via telephone at 7 and 90 days. Quality of life and patient activation were the primary outcomes, measured by the PROMIS Global 10, and the Patient Activation Measure (PAM), respectively. We compared treatment efficacy by comparing the change in outcomes between the three groups (N=265) using a difference-in-differences (D-in-D) analysis. The mean change in PROMIS scores for the social work + technology group was significantly higher than both the social work only group (difference= +2.4; 95%CI=0.46, 4.34; p=0.02) and usual care (difference= +3.4; 95%CI=1.41, 5.33; p<0.001). The mean change in PAM scores for the social work + technology group was significantly higher than the social work only group (+6.7; 95%CI=1.26, 12.08; p=0.02) and marginally higher than usual care (+5.0; 95%CI=-0.47, 10.52; p=0.07).

SESSION 4025 (SYMPOSIUM)

GOING FOR THE WIN-WIN-WIN: HARNESSING THE POWER OF SENIOR VOLUNTEERISM TO ADDRESS DEMENTIA CARE AND PROMOTE HEALTH

Chair: Quincy M. Samus, *The Johns Hopkins University, Baltimore, Maryland, United States*
Co-Chair: Joseph E. Gaugler, *University of Minnesota - School of Public Health, Division of Health Policy and Management, Minneapolis, Minnesota, United States*

Discussant: George W. Rebok, *Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States*

The public health implications of Alzheimer's disease or related dementias (ADRDs) are significant and have placed considerable pressure on the U.S. healthcare system. Training and mobilizing a critical mass of volunteers to address unmet dementia care needs may be a potent, scalable, and cost efficient approach to address gaps in dementia care and to support family caregivers. Further, by engaging older volunteers to do this work and remain in productive and impactful post-retirement roles, additive population health benefits may be possible. This session will focus on ways we might harness the power of senior volunteers to meet the public health challenges associated with ADRD. Presentations will draw from three innovative community-based projects that utilize senior volunteers to support and enhance health in aging and dementia care. Dr. Carlson will provide an update on the evaluation and scaling Experience Corps, an intergenerational program that engages senior volunteers to work in elementary schools. Dr. Gaugler will discuss the Porchlight Project, a new multicomponent training approach for senior volunteers in Minnesota to enhance dementia care capabilities and support to underserved older persons. Dr. Samus will introduce the MEMORI Corps program, a novel activity-based companion care program for home-residing persons with ADRD delivered by trained senior volunteers. Given the current and impending shortages in the geriatric work force and family caregivers, respectively, innovative and readily available long term service and support options are needed to offset potential care gaps. The current session proposes the novel incorporation of volunteers as one solution to do so.

MAKING ENGAGEMENT MEANINGFUL THROUGH ORGANIZED ROUTINE INTERACTION (MEMORI) CORPS TRIAL: AN INTRODUCTION

Quincy M. Samus,[1] Laura N. Gitlin,[2] Michelle Carlson,[1] George Rebok,[1] Deirdre Johnston,[1] Jeannie-Marie Leoutsakos,[1] and Betty Black[1], *1. The Johns Hopkins University, Baltimore, Maryland, United States, 2. Drexel University, Philadelphia, Pennsylvania, United States*

This presentation will review the design, methods, and early lessons learned from the Making Engagement Meaningful through Organized Routine Interaction (MEMORI) Corps trial recently funded by NIA. This trial is evaluating the feasibility and efficacy of the MEMORI Corps program, a novel 12-week activity-based companion care model designed to mobilize and equip senior volunteers to deliver individualized, evidence-based activity programming to persons with dementia PWD living at home and offer family CGs needed respite. The intervention synthesizes and adapts prior evidence-based work from the Tailored Activities Program® (an activity-based intervention persons with dementia), Experience Corps® (an intergenerational civic engagement program that engages senior volunteers to work in elementary schools), and MIND at Home® (a home-based dementia care coordination program) to simultaneously address unmet respite care needs of family CGs, provide PWD structured meaningful activities and social engagement, and provide meaningful engagement and peer support opportunities for senior volunteers.

THE PORCHLIGHT PROJECT: PARTNERING WITH VOLUNTEERS TO ENHANCE COMMUNITY-BASED DEMENTIA CARE AND OUTREACH

Joseph E. Gaugler,[1] Christina Rosebush,[2] Gabriela Bustamante,[2] Jeri Schoonover,[3] Roxanne Jenkins,[4] Nicole Bauer,[3] Lisa Beardsley,[3] and Laura Rowe[3], *1. University of Minnesota - School of Public Health, Division of Health Policy and Management, Minneapolis, Minnesota, United States, 2. Division of Environmental Health Sciences, School of Public Health, University of Minnesota, Minneapolis, Minnesota, United States, 3. Lutheran Social Service of Minnesota, St. Paul, Minnesota, United States, 4. Lutheran Social Service of Minnesota, Saint Paul, Minnesota, United States*

Families often remain unaware of long-term services and supports (LTSS) that could help to mitigate the negative effects of Alzheimer's disease and related dementias (ADRDs). Approaches that: a) identify community-residing older persons with potential memory impairment; b) assist their families in navigating the healthcare system; and c) facilitate the identification of appropriate community-based LTSS could result in more effective management of ADRD. The Porchlight Project is a multicomponent training approach for lay volunteers in Minnesota (i.e., Senior Companions) that enhances their capability to deliver dementia care and support to underserved older persons in need. Mixed methods analysis of qualitative and quantitative data among 20 Senior Companions and up to 25 persons with ADRD and their family caregivers suggest the potential success of the Porchlight Project, as well as areas to refine and enhance prior to large-scale evaluation throughout Minnesota.

THE IMPACT OF MEANINGFUL VOLUNTEER ENGAGEMENT IN AGING ADULTS: THE BALTIMORE EXPERIENCE CORPS TRIAL

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Experience Corps was designed to embed cognitive, social, and physical activity into volunteer service by training older adults to serve in neighborhood elementary schools as mentors of children in Kindergarten-3 for 15 hours a week over two academic years. We incorporated cognitive activities through the intentional design of a variety of roles in reading, math, library support, and positive communication. Socially, volunteers engage with other volunteers, teachers, and children, and functional walking 3-4 days/week to and from as well as within the schools. The Baltimore Experience Corps Trial (BECT) is the largest randomized controlled trial (N = 702) examining the impact of volunteer engagement on cognitive functions in cognitively intact older adults, over sampling African Americans (91%) who have twice the risk of Alzheimer's disease as whites. Findings will be summarized and demonstrate the dose-dependent cognitive, psychosocial, lifestyle activity, and brain benefits of volunteering for up to two years.