demonstrate the unique therapeutic effects of MM and TCC on improving sleep problem in older people. The application in a Chinese context will be discussed.

POST-ACUTE REHABILITATION IN PERSONS WITH DEMENTIA: DOES IT MAKE A DIFFERENCE?

Jane Flanagan,¹ Marie Boltz,² and Ming Ji,³ 1. Boston College, Chestnut Hill, Massachusetts, United States, 2. Penn State University, University Park, Pennsylvania, United States, 3. U. South Florida, Tampa, Florida, United States

Persons with dementia are about two times more likely to be hospitalized than their peers who are cognitively healthy. These individuals are frequently discharged to skilled nursing facilities or nursing home settings, to receive short-term, postacute, rehabilitative care. The rehabilitative care, Physical Therapy (PT) and Occupational Therapy (OT), provided in skilled nursing facilities (SNFs) aims to restore the person to their pre-hospitalization functional status and assist the person to return home. This study used MDS assessment data of 6396 people, age 65 years and older with dementia, admitted to SNFs in 2013 from acute care hospitals in Massachusetts to assess the effects of OT and PT on the change in physical function of nursing home residents admitted to the nursing home after hospitalization. Multiple linear regression analyses. The sample was mostly female (64.1%), non-Hispanic (98.86%), and white (93.71%), with a mean age of 85.3 (SD=6.85). After controlling for age, gender, race and comorbidities, and delirium, rehabilitation interventions (OT, PT or OT+PT) did not have any significant effect on changes in physical function among residents with dementia (p for OT = 0.14; p for PT=0.59; p for OT+PT:= 0.32). Additionally, non-white residents had poorer function at three months ($\beta = 1.86, 95\%$ CI:-3.57- -0.16). The results indicate for persons with dementia admitted to SNFs, OT, PT or OT+PT did not lead to a significant improvement physical function. More innovative and effective interventions should be developed to improve physical function in persons with dementia post-hospitalization.

PREFRONTAL CORTEX HEMODYNAMICS DURING EXERCISE IN OLDER ADULTS WITH MOTORIC COGNITIVE RISK SYNDROME

Kell Grandjean da Costa,¹ Eduardo Fontes,² Alekya Menta,² Sarah White,³ Roger Fielding,⁴ Christopher Kowaleski,⁵ Nathan Ward,¹ and Kieran Reid,⁴ 1. Tufts University, Medford, Massachusetts, United States,

- 2. Tufts University, Medford, United States,
- 3. Tufts University, Boston, United States, 4. Tufts University, Boston, Massachusetts, United States,
- 5. Somerville Council on Aging, Somerville, Massachusetts, United States

The motoric cognitive risk syndrome (MCR) is a recently described pre-dementia syndrome in older adults characterized by slow gait coupled with subjective cognitive complaints. While previous studies have demonstrated the benefits of exercise on cerebral hemodynamics in healthy older adults, to date, no study has characterized the effects of exercise on these parameters among more vulnerable older persons with MCR. To address this knowledge gap, we investigated how the brain area responsible for high-order cognitive function (i.e., prefrontal cortex) is affected

during acute cycling exercise in 19 older adults with MCR (Age (mean \pm SD): 73.7 \pm 7.1 years; BMI: 32.1 \pm 5.5 kg/ m2; gait speed: 0.55 ± 0.1 m/s; Modified Mini-Mental score: 91.8 ± 6.8; 74% female). Participants performed an incremental submaximal cycling test and we used functional nearinfrared spectroscopy to assess changes in concentrations of Oxyhemoglobin (O2Hb), Deoxyhemoglobin (dHb) and total hemoglobin (Hbt) during exercise. Results showed that participants cycled for 4.9 ± 0.5 minutes, achieved a submaximal load of 54.7 ± 17.3 watts, a peak exercise heart rate of $95.7 \pm$ 14.7 beats/min and a rate of perceived exertion (13.8 \pm 2.0). Compared to baseline, there was an increase of 97.3 % in the O2Hb, 86 % on the Hbt and an 87.9 decrease of dHb while exercising. Our findings suggest that acute exercise at light through moderate intensity increases prefrontal cortex oxygenation in older adults with MCR. Additional studies are also warranted to characterize the effects of chronic exercise on cerebral hemodynamics in at-risk older adults.

RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND FUNCTION WITH QUALITY OF LIFE IN COMMUNITY-LIVING OLDER ADULTS

Milan Chang,¹ Olof Geirsdottir,¹ Inga Thorsdottir,¹ Palmi Jonsson,¹ Alfons Ramel,² and Milan Chang Gudjonsson, 1. University of Iceland, Reykjavik, Iceland, 2. University of Iceland, Reykjavik, Capital area, Iceland

Background: Quality of life (QOL) is a multidimensional concept which is often used as an evaluation of a person's health and psychological status. Increasing longevity can be associated with better QOL as long as older adults are independent in daily life. The aim of the study was to examine the associations of QOL with muscle strength and physical function among community-dwelling older adults. Methods: The current cross-sectional study had 225 participants (73.7±5.7yrs, 58.2% female) living in Reykjavik, Iceland. QOL measured using the 36-item short-form survey (SF-36). Covariates were anthropometrics, muscle strength, physical function including timed up and go test (TUG), and 6-minute walking distance (6MWD), physical activity per week (PA). Linear regression analysis was used to examine the association of QOL with physical function. Results: The mean QOL score for the study population was 54.9±6.13. The analysis was adjusted for age and gender, body mass index, height, and PA. We found that QOL was associated with better grip strength (B=1.4, P<0.0001), 6MWD (B=0.03, P<0.0001), slower TUG (B=-0.9, P<0.0001), and higher PA (B=0.03 m, P=0.039). However, QOL was not associated with quadriceps leg strength. Conclusion: The study suggests that QOL was associated with better physical function including grip strength, walking ability and the level of PA among community-dwelling older adults in Iceland.

SATISFACTION WITH OUTDOOR ACTIVITIES OVER TIME AMONG LONG-TERM SERVICES AND SUPPORTS RECIPIENTS

Justine Sefcik,¹ Karen Hirschman,² Darina Petrovsky,³ Liming Huang,³ Nancy Hodgson,⁴ Liza Behrens,⁵ and Mary Naylor,² 1. *Drexel University, Philadelphia, Pennsylvania, United States,* 2. *New Courtland Center for Transitions and Health, Philadelphia, Pennsylvania,*