PHYSICAL ACTIVITY AT THE INTERSECTIONS OF AGING AND DISABILITY

Chair: Annalisa Na Discussant: Annalisa Na

Physical activity is beneficial for older adults to maintain health and help manage chronic diseases but relies on routine participation. Some older adults continue with physical activity behaviors as they age, whereas others are negatively affected by impaired functional abilities, physical disabilities, and unmet psychosocial needs. This symposium presents quantitative and qualitative data on physical and psychosocial factors that can influence physical activity among older adults with varying levels and types of physical abilities. The first presentation will focus on aging into the disability associated with knee osteoarthritis, the leading cause of mobility decline among older adults that generally onsets after the fifth decade of life. The second presentation will focus on aging with a disability, specifically how health perspectives evolve when aging with a spinal cord injury. The third presentation will highlight how the COVID-19 pandemic has influenced outdoor physical activity among older adults when indoor activities became limited. The fourth presentation shifts perspectives to clinicians, specifically physical therapists, to explore the needs for addressing physical activity in the clinic. The fifth presentation outlines a physical activity intervention program and its implementation for community-dwelling older adults. Together, these presentations will provide practical insights for designing a person-centered program to improve physical activity for older adults including those aging into disability or aging with disability.

IMPACT OF TOTAL KNEE ARTHROPLASTY ON PHYSICAL ACTIVITY

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Knee osteoarthritis (OA) pain often challenges the physical activity necessary for managing life-threatening chronic diseases. Standard severe knee OA treatment of total knee arthroplasty (TKA) and physical therapy (PT) is effective at improving pain and function but whether such benefits translate to physical activity is unclear. We enrolled 22 participants with severe knee OA scheduled for a TKA (Age,median±SD=69.0±5.8y, female=63.6%) and assessed pain (i.e., Numeric Pain Rating), physical function (i.e., Knee Osteoarthritis Outcome Score), and physical activity (i.e., activity monitors and journals for 7-days) before and 1-month, 3-month, and 6-month after TKA. Using paired-wise ANOVA, pre-to-post TKA pain and function improved but not physical activity. Using regression analyses, outpatient PT sessions during first two months post-TKA were positively related to 3- and 6-month physical activity (r=0.51-070, P=0.003-0.029). Standard TKA and PT for severe OA improved pain and function but not physical activity. However, early post-TKA PT and physical activity relationships are promising, warranting exploration.

OUTDOOR PHYSICAL ACTIVITY AMONG OLDER ADULTS DURING THE COVID-19 PANDEMIC

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Outdoor physical activity during the COVID-19 pandemic has been limited for many older adults due to restrictions and fear of exposure to the virus. The study aimed to explore changes in outdoor physical activity behaviors among older adults during the pandemic. A total of 124 older adults (Age, median±SD=76.5±6.7y, female=57.1%) completed surveys at baseline and 6-month follow-up. Using paired-wise ANOVA, outdoor physical activity (i.e., walking/jogging, cycling, and swimming) decreased significantly during the pandemic (P<0.05). Participants reported increased sedentary behavior (i.e., sitting/tv watching, reading, and gaming) during this time (P<0.05). These findings highlight the need for interventions to promote outdoor physical activity among older adults during future pandemics.

PERSPECTIVES ON HEALTH AND AGING WITH SPINAL CORD INJURY: A QUALITATIVE DESCRIPTIVE STUDY

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Age of spinal cord injury (SCI) onset and life expectancy have increased over the last half century, but minimal inquiry on health and aging lived experience perspectives are available. The objective of this study was to begin to examine this through a qualitative descriptive design. Nine group interviews were conducted with individuals living with SCI (n=24) 22-76 with injury duration 3-47 years. Participant descriptions on health and aging were thematically analyzed. Health maintenance was related to physical routine to prevent secondary health conditions, injury acceptance, and engagement with disability networks. Aging outlook was connected to fear of dependence and lack of education on aging with SCI. These findings demonstrate that clinicians and researchers should investigate issues beyond routine self-management to support life with SCI. Personal considerations based on life stage when injured warrants investigation. Advocacy for peer-support is imperative at all life stages given its positive impact on health.
There is a gap in understanding how the current pandemic is affecting older adults’ outdoor physical activity. This study aimed to explore older adults’ perceptions of their outdoor physical activity during the current pandemic. A qualitative descriptive approach was taken with a conventional content analysis. Participants were primarily recruited through ResearchMatch. Eighteen community-dwelling older adults were individually interviewed from geographical locations across the United States; 61.1% female, 88.9% White, mean age 76.4 (range 68-92), 5 ambulated with a cane or walker. We identified an overarching theme of Benefits and Motivation in which older adults conveyed wanting to maintain and improve their health and used the outdoors to continue physical activity since indoor activities decreased during the pandemic. Walking was expressed as the most frequent outdoor physical activity. Implications of these findings will be discussed which include supporting community improvements to facilitate older adults’ ease of maintaining a walking routine.

FROM KNOWING TO DOING: WHAT IS NEEDED TO SUPPORT PATIENTS IN CHANGING PHYSICAL ACTIVITY
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Physical therapists often treat pain and functional limitations associated with chronic musculoskeletal conditions common in aging adults. While patient report improvement after physical therapy, these results do not translate to sustained physical activity. This is a lost opportunity to support aging adults in adopting behaviors proven to improve quality of life and reduce comorbidity burden. We conducted semi-structured interviews with 30 physical therapists to understand how they support adoption of physical activity and identify what is needed to improve uptake. Physical therapists endorse physical activity as essential in the management of MSK conditions. Eliciting motivation, addressing psychosocial needs, and empowering patients to actively engage in solutions were identified as significant challenges in the effort to change physical activity. At the clinician level, physical therapists identified the need for improved skills in motivational interviewing and person-centered communication. Improved coordination with mental health providers and community resources were identified as environmental needs.

COACH2MOVE: THE STORY OF IMPLEMENTING A PERSON-CENTERED PHYSICAL THERAPY APPROACH IN CLINICAL PRACTICE
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Coach2Move is a person-centered physical therapy approach to promote physical activity among community-dwelling older adults, which consists of motivational interviewing and other motivational strategies. Coach2Move has been implemented in the Netherlands with 52 physical therapists and 294 patients in 16 practices. Implementation has led to better outcomes (increased physical activity, improved functional mobility, and lower levels of frailty) in fewer treatment sessions compared with usual care physical therapy treatment. Implementing was carried out using the following steps: 1) an e-assessment to determine the baseline level of knowledge regarding Coach2Move of the participating therapists; 2) two education days in Motivational Interviewing and Coach2Move specific motivational strategies; 3) three unique peer-assessment meetings and 4) a retest of the e-assessment one year later. We will discuss our rationale for selecting implementation strategies and which barriers and facilitators we have experienced in implementing successful scientific research in daily clinical practice.

SESSION 1130 (SYMPOSIUM)

PSYCHOSOCIAL RESILIENCE, FAMILY SUPPORT, AND COGNITIVE STATUS: FROM EVIDENCE TO ACTION
Chair: Hanzhang Xu Co-Chair: Bei Wu Discussant: Man Guo

Increasing evidence suggests the important role of social connections and family support in maintaining optimal cognitive status among older adults. This symposium includes four studies from China and the U.S with a focus on generating actionable evidence to inform the development of strategies that target psychosocial resilience and family support to promote cognitive health. Using data from the 2006, 2010, and 2014 waves of the Health and Retirement Study, the first study assessed the impact of social isolation on cognitive function, and how sleep disturbance mediated the association on cognitive decline. The study findings suggest addressing sleep disturbance might be a viable way to mitigate the negative effect of social isolation on cognitive function. Companion piece includes another HRS-based study that assessed the impact of loneliness on psychological resilience and cognitive health in later life. Findings from this study show loneliness is indirectly associated with baseline cognitive status and accelerated cognitive decline through deteriorating psychological resources. The third study used a prospective longitudinal design and applied group-based trajectory modeling to identify distinct family functions among 170 Chinese stroke survivors. Four family function trajectories were identified; healthy and stable family function was associated with better cognition and quality of life. Lastly, the fourth study aimed to use an experienced-based co-design approach to develop a cognitive training intervention to promote cognitive health in older Chinese immigrants in the U.S. This approach allows researchers to engage end-users early and to optimize the development of a culturally and linguistically relevant cognitive training intervention.

COGNITIVE TRAINING FOR OLDER CHINESE IMMIGRANTS IN THE US: AN EXPERIENCE-BASED CO-DESIGN APPROACH
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