

GENDER DIFFERENCES IN PREDICTIVE FACTORS OF OLDER ADULTS' IADL RECOVERY FOLLOWING HIP FRACTURE

Elise Colanecceco,¹ Ann Kolanowski,² and Vernon Chinchilli,³ 1. *Moravian College, Summit Hill, Pennsylvania, United States*, 2. *Penn State University, University Park, Pennsylvania, United States*, 3. *Penn State College of Medicine, Hershey, Pennsylvania, United States*

After hip fracture, older adults experience poor functional outcomes including a lack of IADL recovery. Gender differences exist in risk, incidence, mortality, and complication rates; yet, analyses of predictive factors of IADL especially by gender are often not conducted. The purpose of this study was to investigate gender differences in predictive factors of IADL recovery for older adults at two and six months following hip fracture. This secondary analysis used data (n=326 with IADL of n=399) the Baltimore Hip Studies (BHS-7 cohort). Participants were >65 years of age and community-dwelling. Men were sequentially enrolled; women were frequency-matched. Data analysis required building a shared parameter model was built that incorporated an ordinal logistic regression within a generalized linear mixed-effects model, in conjunction with a time-to-event hazards regression model for the time to death or withdrawal. Predictive factors included: age, race, marital status, and comorbidities; physical function; cognitive status (3MS); and psychosocial function (depression [CES-D], resilience, fear of falling, social participation, and perceived health status. Results indicated that higher age (OR 1.1 95% CI 1.05, 1.15, $p < .01$), greater comorbidity burden (OR 1.31 95% CI 1.08, 1.6, $p < .01$), poorer baseline Lower Physical ADL (OR 1.8 95% CI 1.54, 2.15, $p < .01$), better cognitive function (OR 0.95 95% CI 0.9, 1; $p = 0.047$) and poorer LPADL recovery (OR 1.27 95% CI 1.07, 1.5, $p < .05$) significantly impacted IADL recovery. The stratified (by gender) model was not as strong as the full model, but did indicate some gender differences may exist.

HIGH COGNITIVE LOAD SITUATIONS DECREASE BOTH GAIT AND COGNITIVE PERFORMANCE

Hyeon Jung Kim, Farahnaz Fallahtafti, Jennifer Yentes, Dawn Venema, and Julie Blaskewicz Boron, *University of Nebraska Omaha, Omaha, Nebraska, United States*

A high cognitive load situation (HCLS) is completing two or more tasks simultaneously (i.e. walking while talking). Differential allocation of attentional demands creates HCLS, potentially deteriorating cognitive and/or gait performance, impacting fall risk. This study investigated whether different load types [(Single-task (ST): talking/walking only, and HCLS: walking while talking on a phone)] impacted gait and cognitive performance among young (n=8; age=23.16±1.96yrs), middle-aged (n=14; age=44.79±7.42yrs), and older (n=15; age=74.47±3.91yrs) adults. In 3-minute trials, participants completed single-task walking (ST-W) and phone conversations with easy (e.g., favorite food, ST-E) and difficult (e.g., personal relationships, ST-D) topics, and also combined walking and talking (easy: HCLS-E and difficult: HCLS-D). For gait, speed, step length (SL) and stride width (SW) were analyzed with 3(ST-W, HCLS-E, HCLS-D) x 3(Age)

repeated-measures ANOVAs. HCLS resulted in slower speed ($p < .001$, shorter SL ($p < .001$), and wider SW ($p = .008$) across groups. Older adults exhibited shorter SL across walking conditions ($p = .002$) compared to young and middle-aged. For cognition, Word Count (WC) and Authenticity (i.e. honesty) were analyzed with 2(Evs.D) x 2(STvs.HCLS) x 3(Age) repeated-measures ANOVAs. Main effects emerged for conversation topic in WC ($p = .04$) and Authenticity ($p < .001$); difficult topics negatively impacted participants' cognitive performance, likely resulting from higher attention to maintain conversations without personal interactions (i.e. visual cues). Marginal age-group differences ($p = .056$) revealed older age resulted in less authentic conversations. The HCLS in this study negatively impacted gait and cognitive performance. Understanding this relationship may ultimately inform development of interventions to improve allocation of attentional demands, potentially mitigating fall risk.

INFLUENCE OF DRIVING AND TRANSPORTATION ACCESS ON SOCIAL ISOLATION RISK AMONG OLDER ADULTS

Matthew Smith,¹ Caroline Bergeron,² Matthew Barrett,¹ Leigh Ann Eagle,³ and Sue Lachenmayr,³ 1. *Texas A&M University, College Station, Texas, United States*, 2. *Institut national de santé publique du Québec, Québec City, Québec, Canada*, 3. *MAC, Salisbury, Maryland, United States*

Background. Transportation is essential to accessing healthcare and community services, but the inability to find transportation may hinder social interactions and connectivity. This study examined driving and transportation access associated with self-reported social isolation risk among adults age 60 years and older. Methods. The Upstream Social Isolation Risk Screener (U-SIRS) was developed to assess social isolation risk among older adults within clinical and community settings. Comprised of 13 items (Cronbach's alpha=0.80), the U-SIRS assesses physical, emotional, and social support aspects of social isolation. Using an internet-delivered survey, data were analyzed from a national sample of 4,082 adults age 60 years and older. Theta scores for the U-SIRS served as the dependent variable, which were generated using Item Response Theory. An ordinary least squares regression model was fitted to identify transportation-related indicators associated with social isolation risk. Results. Approximately 13% of participants did not drive and 18.2% reported not being able to identify a ride or transportation when needed. Higher U-SIRS scores were reported among participants who did not drive ($B = 0.034$, $P = 0.020$). Lower U-SIRS scores were reported among those who live with a spouse/partner ($B = -0.153$, $P < 0.001$) and those who reported the ability to get a ride from a family member ($B = 0.160$, $P < 0.001$), friend ($B = -0.256$, $P < 0.001$), or taxi ($B = 0.032$, $P = 0.044$). Every additional source of transportation available significantly reduced participants' U-SIRS score ($B = -0.239$, $P < 0.001$). Conclusion. Given transportation options may reflect physical functioning, social networks, and socioeconomic status, study findings suggest transportation access is an important contextual factor associated with social isolation risk.