20 months of trial recruitment, we had recruited just 28 patients and 10 of their caregivers. Findings from this terminated trial may inform other researchers in development of participant recruitment methods.

IT'S YET ANOTHER THING: BARRIERS TO AND RECOMMENDATIONS FOR PHYSICIAN REFERRALS TO HOME-BASED PALLIATIVE CARE

Alexis Coulourides Kogan,[1] Valeria Cardenas,[2] YuJun Zhu,[2] Jenna Giulioni,[3] Anna Rahman,[4] and Susan Enguidanos,[4] *1. USC Keck School Of Medicine, Alhambra, California, United States, 2. University of Southern California, SOUTH PASADENA, California, United States, 4. USC Division of Biokinesiology and Physical Therapy, Los Angeles, California, United States, 5. University of Southern California, Los Angeles, California, United States*

To understand primary care providers' (PCPs) experiences with referring patients to home-based palliative care (HBPC), we conducted individual, key-informant interviews with 31 PCPs. About half participants were male (54.8%), White (42.5%), US-born (58.1%), and were 57 years old (SD=9.17), on average. About one-third of participants (32.3%) indicated they refer 10+ patients annually to HBPC, while most (80.7%) reported "strong" comfort discussing palliative care with patients. Qualitative analysis revealed three prominent thematic categories, each related to barriers PCP experienced when referring patients to palliative care: (1) PCP-level (lack of knowledge and comfort); (2) perceived patient-level (culture, family disagreement, need, home-based aspect); and (3) HBPC program-level (need to close the loop with PCP, insurance coverage, program availability, and eligibility). PCP recommendations for overcoming identified barriers will be discussed. Findings hold important implications for timely patient-referrals to palliative care by PCPs and for sustaining palliative programs that rely on these referrals.

RELUCTANCE TO ACCEPT PALLIATIVE CARE AND RECOMMENDATIONS FOR IMPROVEMENT

Valeria Cardenas,[1] Anna Rahman,[2] Yujun Zhu,[3] and Susan Enguidanos,[2] *1. University of Southern California, University of Southern California, California, United States, 2. University of Southern California, Los Angeles, California, United States, 3. University of Southern California, SOUTH PASADENA, California, United States*

Although insurance companies are increasingly paying for home-based palliative care (HBPC), enrollment remains low. To identify patient and caregiver perceived barriers to HBPC and their recommendations for overcoming these barriers, we conducted semi-structured individual interviews. Our interview protocol elicited participants' perspectives on HBPC services; positive and negative aspects of the palliative program explanation; and suggestions for improving HBPC messaging. Seventeen patients and eight caregivers who were eligible for a randomized controlled trial of HBPC were interviewed. Themes related to HBPC referral barriers included reluctance to have home visits, enrollment timing, lack of palliative care knowledge, and patients' self-perceived health condition. Themes related to recommendations for overcoming these obstacles included ensuring that HBPC referrals come from healthcare providers or insurance companies and presenting HBPC more clearly. Findings reinforce the need for palliative care education among seriously ill patients and the importance of delivering palliative care information and referrals from trusted sources.

BARRIERS TO AND RECOMMENDATIONS FOR RESEARCH RECRUITMENT OF INDIVIDUALS AFFECTED BY SERIOUS ILLNESS

Valeria Cardenas,[1] Anna Rahman,[2] Jenna Giulioni,[3] Alexis Coulourides Kogan,[4] and Susan Enguidanos,[2] *1. University of Southern California, University of Southern California, California, United States, 2. University of Southern California, Los Angeles, California, United States, 3. USC Division of Biokinesiology and Physical Therapy, Los Angeles, California, United States, 4. USC Keck School Of Medicine, Alhambra, California, United States*

Researchers are encountering increasing challenges in recruiting participants for healthcare research. We conducted semi-structured individual interviews to identify participant barriers to research and recommendations for overcoming these challenges. We recruited 17 patients and eight caregivers who were approached to participate in a randomized control trial. We also recruited 31 primary care physicians. Using grounded theory, three researchers independently coded the transcripts and then met to compare codes and reconcile discrepancies. Themes from patient and caregiver interviews included time constraints, privacy concerns, lack of research familiarity, disconnect with research institution, self-perceived health status, and concerns with study randomization and repetitive questions. Physician-identified barriers focused on time constraints and study randomization. Patient and caregiver recommendations for study recruitment included various recruitment techniques. Physician recommendations were related to incentives. Although patients and caregivers prefer that their physicians recruit them for health-related research studies, physicians identified time constraints as a barrier to research involvement.

Session 2130 (Paper)

Physical Functioning and Activity Measurement

EFFECTS OF AGE ON DUAL TASK WALKING PERFORMANCE AS MEASURED USING A SMARTPHONE APPLICATION IN MIDDLE-AGED ADULTS

Junhong Zhou,[1] Gabriele Cattaneo,[2] Wanting Yu,[3] Jose Tormos,[4] Lewis Lipsitz,[3] David Bartres-Faz,[4] Alvaro Pascual-Leone,[5] and Brad Manor,[6] *1. Harvard Medical School/Hebrew SeniorLife, Roslindale, Massachusetts, United States, 2. Universitat Autònoma de Barcelona, Barcelona, Catalonia, Spain, 3. Hebrew SeniorLife, Boston, Massachusetts, United States, 4. University of Barcelona, Barcelona, Catalonia, Spain, 5. Harvard Medical School, Boston, Massachusetts, United States, 6. Hinda and Arthur Marcus Institute for Aging Research, Harvard Medical School, Boston, Massachusetts, United States*

After the age of 65, one's ability to walk while performing an additional cognitive task (i.e., dual-tasking) is predictive of both future falls and cognitive decline. However, while

it is well-known that older adults exhibit diminished dual-task performance, the time course of age-related dual-task decline has not been established. We thus conducted an analysis of data collected within the ongoing Barcelona Brain Health Initiative, a prospective population-based study characterizing the determinants of brain health maintenance in middle-aged adults. Cognitively-unimpaired participants (n=655) aged 40-65 years without neuro-psychiatric disease completed laboratory-based trials of walking normally (single-task) and walking while performing a verbalized serial subtraction task (dual-task). A smartphone-based gait assessment application was used to capture data and derive both the mean stride time (ST) and stride time variability (STV, defined as the coefficient of variation about the mean stride time) of each trial. The dual-task costs (DTC) to each gait metric were obtained by calculating the percent change from single- to dual-task conditions. We categorized participants into five groups according to age (e.g. Group 1: 40-45 years; Group 5: 60-65 years). Age group did not have an effect on single-task gait outcomes (p>0.51). However, the oldest age group, as compared to each of the other groups, exhibited greater DTC to both ST and STV (p<0.03). These results indicate that dual-task walking performance in particular may begin to diminish in late middle age even in the absence of detectable cognitive issues, DTC may offer a sensitive metric to age-related change in cognitive function.

OBJECTIVELY MEASURED PHYSICAL ACTIVITY, SEDENTARY BEHAVIOR, AND INCIDENT FRACTURE IN OLDER WOMEN: THE OPACH STUDY

Steve Nguyen,[1] John Bellettiere,[1] Michael LaMonte,[2] Carolyn Crandall,[3] and Andrea LaCroix,[1] *1. University of California, San Diego Herbert Wertheim School of Public Health and Human Longevity Science, La Jolla, California, United States, 2. University at Buffalo, Buffalo, New York, United States, 3. University of California, Los Angeles, Los Angeles, California, United States*

Women aged 65 and older experience nearly three-fourths of the 2 million osteoporotic fractures annually in the US, yet whether accelerometer-measured volumes and intensities of physical activity and sedentary behavior (SB) are associated with reduced fracture risk is understudied. We investigated associations of accelerometer-measured light physical activity (LPA), moderate-to-vigorous physical activity (MVPA), sedentary time (ST), and mean sedentary bout duration (MBD) with incident clinical fractures (hip, vertebral, pelvis, lower leg, upper arm, forearm, and wrist) in the WHI OPACH cohort. Participants (N=6248; mean±SD age=78.6±6.7; 34% Black, 17% Hispanic) without prior hip fracture wore the ActiGraph GT3X+ for 7 days between May 2012-April 2014 and were followed through March 2020 for incident clinical fracture (N=711). Cox models estimated hazard ratios (HR) and 95% confidence intervals (CI), adjusting for age, race-ethnicity, education, alcohol, smoking, height, weight, falls history, RAND-36 physical function, diabetes, thiazide use, prescription osteoporotic therapy, and age at menopause. The HR(95% CI) across MVPA quartiles was 1.00(reference), 1.15(0.93-1.41), 0.90(0.72-1.13), and 0.79(0.61-1.02); p-trend=0.01. The HR(95% CI) for a one-interquartile range increment in MVPA (42 minutes/day) was 0.86(0.76-0.97). Associations were modified by prescription osteoporotic therapy [no: HR=0.77(0.66-0.89), yes: HR=1.03(0.85-1.25); p-interaction=0.01] and varied in magnitude by age[<80: HR=0.78(0.64-0.96), ≥80: HR=0.92(0.79-1.07); p-interaction=0.09], BMI [<30 kg/m2: HR=0.85(0.75-0.97), ≥30 kg/m2: HR=0.90(0.67-1.19); p-interaction=0.08], and race-ethnicity [Black: HR =0.63(0.44-0.89), Hispanic: HR =0.78(0.56-1.09), White: HR =0.92(0.80-1.06); p-interaction=0.16]. LPA, ST, or MBD were not associated with incident fractures. These data suggest that MVPA may reduce and not increase fracture risk and that LPA and SB do not increase fracture risk.

PREMENOPAUSAL BILATERAL OOPHORECTOMY EFFECTS ON CLINICAL AND REAL-WORLD PHYSICAL FUNCTION MEASURES

Emma Fortune, Omid Jahanian, Melissa Morrow, Virginia Miller, and Michelle Mielke, *Mayo Clinic, Rochester, Minnesota, United States*

Women with premenopausal bilateral oophorectomy (PBO) are at increased risk for physical function (PF) declines. This study investigated the relationships of field-based physical activity measures with clinical PF and strength parameters in post-menopausal women with and without PBO. Women with (n=21; age=64±4 years; BMI=32±8 kg.m-2) and without (n=15; age=67±6 years; BMI=28±6 kg.m-2) PBO performed PF and strength tests (walking speed, distance walked, short physical performance battery (SPBB), leg and chest strength), and wore ankle accelerometers for 7 days (daily step count and loading index [the cumulative sum of each step's skeletal loading]). Age, BMI, step count and loading index were entered into stepwise multiple regression to identify significant predictors of PF and strength parameters. Step count was a predictor of SPBB score in both groups. In women without PBO, step count was a predictor of walking speed; loading index was a predictor of leg strength; step count and loading index were predictors of distance; and step count and age were predictors of chest strength. For PBO women, loading index and BMI were predictors of walking speed and distance; BMI was a predictor of leg strength; and there were no predictors of chest strength. These data suggest while field-based physical activity was strongly and positively associated with clinical PF and strength measures for women without PBO, BMI was a dominant negative factor for PF in women with PBO. Future work will include a larger sample size and additional confounders to further elucidate underlying factors of reduced PF and mobility after PBO.

THE RELATIONSHIP BETWEEN KNEE PAIN AND HEART FAILURE IN OLDER BLACK AND LATINO WOMEN

Raya Kheirbek,[1] Bernadette Siaton,[2] Brock Beamer,[3] Jacob Blumenthal,[2] Les Katzel,[2] John Sorkin,[4] and Beth Hogans,[5] *1. University of Maryland School of Medicine, University of Maryland School of Medicine, Maryland, United States, 2. University of Maryland School of Medicine, Baltimore, Maryland, United States, 3. Baltimore Veterans Affairs Medical Center, BALTIMORE, Maryland, United States, 4. University of Maryland, Baltimore VA Medical Center, Maryland, United States, 5. Johns Hopkins University, Johns Hopkins University, Maryland, United States*