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limb stance (Pain: 38.1 %GC vs. No Pain: 39.2 %GC; $p=0.08$), but more time in double-limb stance (Pain 23.8 %GC vs. No Pain: 22.1 %GC; $p=0.07$) than those without pain. Additionally, a strong negative correlation ($p < 0.001$; $r = -0.956$) between ankle pain intensity levels and average vGRF loading rate was observed among those with ankle pain. The preliminary data suggests patients with CAI who experience ongoing ankle pain might modify their walking gait pattern, which might occur because of the close relationship between higher average loading rates and increased pain intensity levels.

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An Exploration of Low Back Pain Beliefs from a North American Based General Population

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Globally, low back pain (LBP) is the leading cause of years lived with disability. LBP is usually benign yet is often interpreted as an ominous sign of disease. Prior research has demonstrated many populations have misinformed beliefs about the nature, etiology, and prognosis of LBP, with the primary source being healthcare professionals (HCP). There is a gap in knowledge about LBP beliefs in the North American (NA) population. Current beliefs must be identified to inform future educational interventions. We conducted a cross-sectional online qualitative survey to assess NA population beliefs about LBP. Participants were recruited via social media advertisements targeting individuals over age 18 with English speaking and reading comprehension. We used an inductive content analysis approach to develop categories based on participants' responses to 3 open-ended questions about the presumed cause of their low back pain, its persistence, and the source of these beliefs. 62 participants (51 women, 7 men) were included, mean age of 47.6 years, 33 located in U.S.A. and 29 in Canada. Participants presumed causes of LBP fell into three categories: physical (biology, biomechanics, prior injury), psychological, unknown. Similar themes were generated regarding reported reasons for the recurrence or persistence of LBP, with the addition of a single category, environmental. Participants' primary source of beliefs was HCP ($n = 34$, 55%) with secondary sources of family ($n = 12$, 19%) and internet ($n = 12$, 19%). Many participants reported multiple causes for LBP, however, these were mostly focused on the physical body, with minimal consideration of psychological and sociological influences. [PASD1] Our study findings align with prior research from other regions in the world, further demonstrating a need for updating clinical education and public messaging about LBP. Funding provided by Faculty Research Fund at Bridgewater College.

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The Influence of Movement-Evoked Pain on Lower Extremity Physical Function in Older Adults

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Older adults often exhibit impaired lower extremity physical function, which promotes a sedentary lifestyle and contributes to the development of adverse health outcomes. Studies have identified several factors that contribute to lower extremity physical function in older adults, including body mass index (BMI), self-reported pain severity, and number of painful sites. An understudied area that may improve our understanding of these impairments is movement-evoked pain (MEP). Therefore, the purpose of this study was to determine if movement-evoked pain was associated with lower extremity physical function in older adults. Older adults ($n=67$) completed several lower extremity physical function tasks, including a balance, gait, and chair stand assessment, and isokinetic knee flexion and extension strength testing. MEP ratings following these tasks were obtained using a visual analog scale (0-100). Pain scores from the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) were used to quantify pain severity and participants self-reported number of painful sites. Hierarchical linear regressions were run using three blocks of independent variables (Block 1 = BMI, Block 2 = WOMAC pain scores and number of painful sites, Block 3 = Movement-evoked pain) to assess contributions from each factor for each lower extremity physical

function task. MEP improved the amount of variance explained in gait double support time ($\Delta R^2 = 0.052$, $p = 0.023$). Pain severity and number of painful sites significantly improved the amount of variance explained in stride length ($\Delta R^2 = 0.104$, $p = 0.020$) and repeated chair stand performance ($\Delta R^2 = 0.205$, $p < 0.001$). MEP accounts for a significant amount of variance in gait performance in older adults beyond the known contributions of BMI, pain severity, and number of painful sites. As such, MEP should be considered in the development of future physical function pain assessments and treatments. Grant support from NIA grants K01AG048259, R01AG059809, R01AG067757, the University of Florida Claude D. Pepper Center (P30AG028740), and the University of Florida McKnight Brain Research Foundation and Center for Cognitive Aging and Memory.

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The Relation of Pain, Fatigue, Disease Impact, and Psychological Factors with Physical Function in post-COVID-19 Syndrome, Fibromyalgia, and Chronic Fatigue Syndrome

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This research sought to identify the relation of pain, fatigue, disease impact, and psychological factors with physical function in individuals with post-COVID-19 syndrome (post-COVID), fibromyalgia, chronic fatigue syndrome (CFS), and those with combined diagnoses of post-COVID, FMS, and/or CFS (multi-Dx). Individuals with post-COVID, fibromyalgia, or CFS were invited to complete an anonymous survey. The following patient-reported outcome measures were collected: PROMIS-Physical Function (PROMIS-PF), PROMIS-Pain Interference (PROMIS-PI), Pain Severity (NRS; 0-10), 2016 Fibromyalgia Diagnostic Criteria Survey (FSS), Fatigue Severity (NRS; 0-10), PROMIS-Fatigue, Multisensory Amplification Scale (MSAS), PROMIS-Sleep Disturbance (PROMIS-SD), PROMIS-Dyspnea Severity (PROMIS-DS), Symptom Impact Questionnaire-Revised (SIQR), Coping Strategies Questionnaire-Catastrophizing Subscale (CSQ-CAT), Tampa Scale of Kinesiophobia-11 (TSK-11), and Hospital Anxiety and Depression Scale (HADS). Stepwise multiple linear regressions examined relationships between symptoms, disease impact, and psychological factors on physical function in each cohort. Results show 707 individuals (294-males, 413-females) completed surveys including 203 post-COVID, 99 FMS, 87 CFS, and 318 multi-Dx. Physical function was impaired in each cohort (post-COVID: 40.7 ± 8.6 ; FMS: 39.5 ± 5.5 ; CFS: 39.5 ± 7.2 ; multi-Dx: 39.3 ± 5.5). Regression analyses were significant for post-COVID ($R^2 = .668$, $p < .001$), fibromyalgia ($R^2 = .502$, $p < .001$), CFS ($R^2 = .663$, $p < .001$), and multi-Dx ($R^2 = .611$, $p < .001$). Unique factors significantly predicted physical function in each cohort as follows: 1) Post-COVID - dyspnea ($\beta = -.453$, $p < .001$), fatigue ($\beta = -.182$, $p = .003$), pain interference ($\beta = -.196$, $p = .007$), anxiety ($\beta = .138$, $p = .007$), symptom impact ($\beta = -.185$, $p = .026$); 2) fibromyalgia - fatigue ($\beta = -.470$, $p < .001$), symptom impact ($\beta = -.351$, $p < .001$); 3) CFS - symptom impact ($\beta = -.427$, $p < .001$), anxiety ($\beta = .328$, $p < .001$), dyspnea ($\beta = -.210$, $p = .007$), fatigue ($\beta = -.334$, $p < .001$), sleep disturbance ($\beta = .249$, $p = .002$), kinesiophobia ($\beta = -.200$, $p = .014$); 4) multi-Dx - fatigue ($\beta = -.350$, $p < .001$), symptom impact ($\beta = -.201$, $p < .001$), sleep disturbance ($\beta = -.183$, $p < .001$), pain interference ($\beta = -.181$, $p < .001$). Disease impact and fatigue related to physical function in all cohorts while pain interference, dyspnea, sleep disturbance, and psychological factors had varying relationships with physical function among individuals with post-COVID, FMS, CFS, and multi-Dx. Grant support from National Institutes of Neurological Disease and Stroke (NINDS) of the NIH under Award Number U24NS112873-03S2.

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Where Do You Sleep? – Actigraphic Sleep Quality Mediates the Relationship between Neighborhood Disadvantage and Physical Function in Individuals with Painful Knee Osteoarthritis

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Individuals with painful knee osteoarthritis (OA) frequently report poor sleep quality. Neighborhood disadvantage has been shown to