research conducted in the last decade. After performing quality appraisal using the Oxford Centre for Evidence-based Medicine's levels of evidence, we synthesized findings from 38 qualifying studies and developed a new conceptual model driven by observation of behaviors indicating pain in persons with dementia unable to self-report. The model represents the cognitive, affective, ethical, and behavioral components of clinical empathy involved in assessing and treating pain, relevant patient outcomes, and contextual factors influencing empathy and outcomes; and provides a framework for testing clinical empathy interventions to improve adverse outcomes in persons with advanced dementia. Understanding the relationship between clinician empathy and the assessment/treatment of pain in persons with dementia may improve care quality and help reduce pain behaviors in this population. This model may be used to inform pain research in persons with dementia and develop clinical interventions and clinician education programs.

SESSION 3026 (PAPER)

PHYSICAL ACTIVITY AND EXERCISE

A LONGITUDINAL ANALYSIS OF SF-36 SCORES WITHIN THE CANDRIVE COHORT: AN EXAMPLE OF SURVIVOR BIAS

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A bias inherent to prospective studies is focusing only on individuals who remain in the study; these individuals may differ from those who leave early. To examine this issue, we analyzed SF-36 scores by completion status for individuals enrolled in the seven-year Candrive cohort. The SF-36 provides a self-reported evaluation of health and well-being along two subscales, the Physical Component Summary (PCS) and the Mental Component Summary (MCS). Of 928 participants in the cohort, 887 had at least two consecutive years of data starting at baseline (age=76.17, SD=4.81; 61.9% male). A total of 142 participants had 7 years of data. Study discontinuation (due to withdrawal, driving cessation, or death) happened least in early years, and peaked after 6 years (n=235). When analyzed according to completion status, patterns of change in SF-36 scores varied. For example, participants with 7 years of data had mean PCS scores ranging from 51.41 (SD=7.92) at baseline to 46.93 (SD=9.46) at year 7, a change of 0.75 points per year. For those with only two years of data, scores were lower and dropped from 45.82 (SD=9.98) to 43.59 (SD=10.90), a change of 2.23 points over a single year (p<.001). Differences are also evident for other groups. While the results indicate relative stability of SF-36 scores among participants who remained in the study, participants who dropped out reported greater deterioration in scores. These results highlight important differences between participants based on completion status.

EXERCISE STRATEGIES FOR OPTIMIZING AEROBIC CAPACITY AND SKELETAL MUSCLE PERFORMANCE IN OLDER ADULTS

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Most older adults do not exercise regularly. Among those who do, the majority only perform one type of exercise, and— as such— are either not getting the benefits of endurance exercise or resistance exercise. The aim of this pilot study was to determine which standalone exercise strategy has the greatest effect on both cardiorespiratory and lower-extremity muscular function in insufficiently active older adults 60 to 75 years of age (N = 14). Participants were randomly assigned to either resistance training (RT, n=5), moderate intensity continuous training on a stationary bicycle (MICT, n=4), or high-intensity interval training on a stationary bicycle (HIIT, n=5) for supervised exercise sessions three times per week for 12 weeks. Maximal oxygen consumption increased a comparable amount in all groups (11.9±11.2% for HIIT vs. 8.0±14.8% for MICT vs 9.8±5.7% for RT). Leg extensor power did not change in the HIIT group (-0.34±5.2%), but increased by 5.2±9.7% in the MICT group and 14.5±26.1% in the RT group. Leg extensor strength decreased by 1.7±22.1% in the HIIT group and 0.6±6.4% in the MICT group, but increased by 27.3±21.2% in the RT group. These findings demonstrate that RT results in improved lower-extremity strength and power, as well as improvements in maximal aerobic capacity comparable to MICT and HIIT in older adults. Thus, RT should be promoted as an essential exercise strategy for older adults, particularly for individuals who are inactive or that are only performing one type of exercise regularly.

PHYSICAL ACTIVITY PATTERNS AFTER RETIREMENT: THE REGARDS STUDY

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Major life events, such as retirement, may lead to dramatic shifts in physical activity (PA) patterns. However, there are limited empirical data quantifying the magnitude of these changes. Our aims were to objectively measure PA before and after retirement and to describe changes in participation in various types of PA. Participants were employed black and white men and women enrolled in REGARDS (REasons for Geographic and Racial Differences in Stroke), a national prospective cohort study (n=581, mean age 64 years, 25% black, 51% women). Participants met inclusion criteria if they retired between their first and second accelerometer wearing