CIRCADIAN RHYTHM AND QUALITY OF LIFE IN OLDER ADULTS

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Sleep is a significant problem for many older adults who experience changes in their circadian rhythm with age. As a result, older adults may report difficulty falling asleep, staying asleep, or waking up too early. Assessment of circadian rhythm may provide insight into these common sleep complaints to inform interventions. We explored sleep and circadian rhythm in 34 community-dwelling older adults who participated in a study of activity and sleep. Participants wore an actigraphy watch and completed a sleep diary for 7 days. Additional variables included demographics, the SF-12 and Pittsburgh Sleep Quality Index (PSQI). We analyzed their sleep and compared quality of life among participants with poor sleep compared to those without. Participants were 94% female with a mean age of 75.2 (7.6). There were 67.7% Caucasians and 27% Blacks. For the SF-12, physical health (mean 46.07) was worse than mental health (mean 57.8). We identified 29% with self-reported poor sleep based on the PSQI score. By actigraphy, 29% had short sleep duration (<6 hours/night, n=10) and 26% had poor sleep efficiency (<85%, n=8). We found 29% had circadian rhythm sleep disorders: those with delayed sleep phase disorder (n=8) had lower quality of life, scores, both mental (p=.017) and physical health (p=.026), with a trend toward older age (p=.082). Community dwelling older adults may experience poor sleep that may be created by circadian rhythm disturbances impacting quality of life. Further research is needed to explore circadian rhythm disturbances and related factors to improve sleep for this population.

COMBINATION OF AN EXERCISE TRAINING AND FALLS EDUCATION PROGRAM IMPROVES BALANCE, MUSCLE STRENGTH AND FALL RISK

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Benefits of exercise on reducing falls and injuries suggest a need for adopting exercise as a lifestyle. Whereas, many American older adults remain sedentary with increasing age. The highest incidence of falls occurs during routine activities and at home. Older adults prefer to adapt their lifestyle by taking self-control and self-management. Our aim was to evaluate the effectiveness of an 8-week exercise training and falls prevention education program on improving balance performance, muscle strength, and reducing fall risk. Nineteen older adults completed the intervention. Participants received a 40-minute, group-based exercise training and a 20-minute educational program by a trained peer coach once a week and completed a 30-minute, home-based exercise at least two days a week for two months. They were encouraged to exercise at home and completed an exercise log to record their progression. Pre-and post-intervention measurement were collected for postural sway, timed up and go test, sit to stand, handgrip strength and the CDC fall risk checklist. The mean age was 75.5 (SD 5.4) years, 74% were women, 21% were Hispanics. 52.6% had no history of falls and 10.5% had no fear of falling. The results showed a significant improvement in

timed up and go (11.81 ± 3.37 to 10.26 ± 3.12), sit to stand (10.68 ± 3.12 to 13.68 ± 5.34), handgrip strength (27.25 ± 10.19 to 35.43 ± 16.28), and fall risk (4.58 ± 4.1 to 3.74 ± 3.7). It is beneficial to combine exercise and falls education in older adults' daily life, through a targeted, short-term intervention led by the trained older adult peer coach.

CREATING A CROSS-WALK BETWEEN TWO COMMONLY USED PROXY-BASED MEASURES OF COGNITIVE IMPAIRMENT: IQCODE AND AD8

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The Informant Questionnaire on Cognitive Decline in Elderly (IQCODE) and the Alzheimer's Disease 8 (AD8) are proxy-based assessments for mild cognitive impairment (MCI) and dementia that are particularly useful when direct cognitive testing of patients is not possible, such as during delirium. The IQCODE consists of 16 Likert questions, while the AD8 consists of 8 yes/no questions and is briefer to administer. We aimed to develop a crosswalk of scores between these measures, and to use established IQCODE cutoffs for MCI and for dementia to define similar cutoffs for AD8. We administered both the IQCODE and AD8 to proxies of enrolled hospitalized patients from two medical centers. We used equipercentile equating to develop the crosswalk of scores between the two instruments. The study sample consisted of 151 patients, with mean age 79 ± 11 years, 55% female. Of the proxies, 47% lived with the patient, and included 34% spouses, 50% children/children-in-law, and 16% other. We equated AD8 and IQCODE scores with good precision (standard error=0.04) throughout the range of cognitive decline (3.0–5.0 for IQCODE, 0–8 for AD8). Previously established cut-off scores of 3.2 for MCI and 3.5 for dementia on the IQCODE equated to scores of 2 for MCI and 4 for dementia on the AD8. Our results suggest that the previously published AD8 cut-off score of 2 for dementia might be overly sensitive, and a cut-off of 4 should be considered. Our results will enable researchers and clinicians to more directly compare studies using these two proxy-based cognitive measures.

EFFECT OF CAREGIVER COPING ON THE LONGITUDINAL ASSOCIATION BETWEEN INCREASED CAREGIVING STRESSORS AND ELDER ABUSE

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Background: Elder abuse has become a top concern for governments in many nations. With its negative effect on individual health, families, and the whole society, elder abuse has become social problem that demand urgent attention from researchers, healthcare providers, and policymakers.