locating device: features, inclusivity, simplicity, aesthetic appeal, and ethics. Participants identified the need for multiple versions of the usability scale including one specifically for persons living with dementia. The newly developed locator device usability scale can enhance the acceptance of these devices, thereby supporting remote caregiving and promote the safety and autonomy of persons living with dementia.

FACTORS THAT INFLUENCE THE EMOTIONAL IMPACT OF MEMORY PROBLEMS IN OLDER ADULTS: A MIXED-METHODS STUDY

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Older adults’ experiences with memory problems may be an important indicator of current and future well-being; however, these experiences and their impacts are poorly characterized, particularly in those with co-occurring affective symptoms. The purpose of this mixed-methods study was to examine how the experience of memory problems influences emotional well-being in older adults without dementia, and whether this differs based on cognitive status and current depressive symptoms or anxiety symptoms. A convergent parallel mixed methods design was used in which quantitative and qualitative data were collected simultaneously, analyzed separately, and then integrated to determine how participants’ experiences differed. Community-dwelling older adults (n=49, Mage = 74.5, 63% female) without severe cognitive impairment completed study questionnaires and two individual, semi-structured interviews. Five themes were identified that described the influence of memory problems on emotional well-being: Evoking Emotions, Fearing Future, Undermining Self, Normalizing Problems, and Adjusting Thinking. The extent to which memory problems impacted emotional well-being depended on multiple factors including current affective symptoms (primarily anxiety), characteristics of the experience (such as judgments of its importance), as well as personal experience with dementia. Notably, there were no thematic differences in the emotional impact of memory problems between older adults with normal cognition and those with evidence of mild cognitive impairment. Our findings suggest that thorough assessment of reports of memory problems, regardless of cognitive testing outcomes, should consider co-occurring subsyndromal affective disorders as well as older adults’ evaluations of how memory problems influence their daily lives and well-being.

FALL PREVENTION IN ADULTS WITH COGNITIVE IMPAIRMENT: SYSTEMATIC REVIEW AND META-ANALYSIS

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Cognitive impairment increases an individual’s risk of falls due to the role cognition plays in gait control. Older adults with dementia fall 2-3 times more than cognitively healthy older adults and there is a lack of evidence for effective fall prevention interventions for community-dwelling cognitively impaired adults. We conducted a systematic review and meta-analysis to investigate the effectiveness of fall prevention interventions in improving falls, perceived risk of falls, gait, balance, and functional mobility. We searched 7 databases for interventions involving community-dwelling adults ≥50 years with mild to moderate cognitive impairment. Reviewers screened citations, extracted data, assessed risk of bias and certainty of evidence (GRADE). We performed a meta-analysis of 509 community-dwelling adults (mean age 67.5 to 84.0 years) with mild to moderate cognitive impairment from 12 randomized controlled trials (8 exercise interventions, 3 multifactorial, and 1 providing medication). Interventions had medium significant effects on perceived risk of falls (SMD -0.73 [-1.10, -0.36]), balance (SMD 0.66 [0.19, 1.12]), and timed up and go test (SMD -0.56 [-0.94, -0.17]) and small significant effects on gait speed and control (SMD 0.26 [0.08, 0.43]) with moderate certainty of evidence. There were no significant effects for falls. Sub-analysis showed that exercise and studies at low risk of bias remained significant for balance and perceived risk of falls. The effect of fall prevention interventions on falls remains unclear; exercise interventions are effective at addressing fall risk factors. However, high quality and longer studies with adequate sample sizes are needed to determine their effectiveness on falls.

HIGHER SERUM BDNF LEVELS ARE ASSOCIATED WITH LOWER RISK OF COGNITIVE DECLINE IN OLDER ADULTS: THE OTASSHA STUDY

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Introduction: There has been growing interest in the use of circulating levels of brain-derived neurotrophic factor (BDNF) in the blood as a biomarker in the context of patients with Alzheimer’s and other neurodegenerative diseases. Prospective data on cognitive decline in the broad older population, however, remain limited. We assessed the relationship of serum BDNF levels with short-term decline in cognitive functioning of community-dwelling older adults.

Methods: Prospective study of 405 adults 65-84 years old without dementia in Tokyo, Japan. The Montreal Cognitive Assessment-Japanese version (MoCA-J) and its subscales were used. Linear regression assessed standardized differences in test score differences between baseline (2011) and follow-up (2013) visits, according to baseline serum BDNF quartiles, with adjustment for baseline demographics, disease indicators, and cognitive scores.

Results: Among participants who performed on the MoCA-J at baseline (scores in bottom quartile), cognitive decline was .65 (95% CI: .08 - 1.2; p=.025) standard deviations (SD) more pronounced in those with lowest than highest BDNF levels. Decline in executive function, but not in other subdomains, was also most pronounced in those