

Veterans Health Care System, San Antonio, Texas, United States, 3. Mississippi State University, Mississippi State, Mississippi, United States

Hoarding disorder in late life has been associated with increased risk for medical conditions and decreased ability to perform activities of daily living in the home; however, no studies have yet examined the relationship between geriatric hoarding and sleep. This study represents a secondary data analysis of older adults who received 26 sessions of group behavioral treatment for hoarding disorder ($n = 41$; mean age 64, range 55-85). Baseline sleep disturbance was significantly associated with hoarding severity, even when controlling for inability to sleep in a bed due to household clutter level. However, no significant change in sleep disturbance was reported following completion of treatment and baseline sleep disturbance was not significantly predictive of change in hoarding symptom severity. Findings suggest that disturbed sleep quality is associated with greater hoarding symptom severity but does not preclude positive symptom change in treatment.

DOES IMPROVING SLEEP IMPROVE COGNITION IN OLDER INDIVIDUALS WITH INSOMNIA?

Christina McCrae¹, *1. University of Missouri-Columbia, Columbia, Missouri, United States*

Late life insomnia is associated with worse cognitive performance. Behavioral/cognitive behavioral treatments for insomnia (BBT-I, CBT-I) improve sleep in older adults, but findings are mixed for cognition. This presentation examines the effects BBT-I and CBT-I on sleep and cognition across three RCTs involving older individuals (community-dwelling [$N=62$, Mage=69.45(SD=7.71)], chronic pain [$N=64$, Mage=53.2 (SD=13.7)], dementia caregiving [$N=36$, Mage=62.32 (SD=6.71)]). Sleep was assessed using daily diaries and actigraphy for 1-2 weeks prior to randomization to treatment or control. Cognition was measured using standardized executive functioning, memory, and attention measures. Multiple regressions revealed improved executive functioning following treatment (caregivers), associations between improved executive performance and greater pain/sleep improvements (chronic pain), and associations between improved attention and processing speed and improved sleep 9-months following treatment (community-dwelling). BBT-I/CBT-I hold promise for improving cognition in older aged individuals with insomnia. Research is needed to determine what factors influence/which patients are most likely to experience cognitive benefits.

THE EARLY BIRD GETS THE WORM, NOT ANXIETY OR DEPRESSION: HOW INSOMNIA SYMPTOMS PREDICT ANXIETY AND DEPRESSION

Courtney J. Bolstad,¹ Anisha L. Thomas,¹ Michael R. Nadorff¹, *1. Mississippi State University, Mississippi State, Mississippi, United States*

Symptoms of insomnia are associated with symptoms of depression and anxiety in older adults, yet less is known about the impact of specific forms of insomnia (i.e. onset, maintenance, and terminal insomnia). We explored how insomnia type predicted symptoms of anxiety and depression in older adults ($n = 133$; mean age 69, range 65-89). We hypothesized that onset and maintenance insomnia would have

stronger relations to depression and anxiety than terminal insomnia. Regression analyses indicated that onset insomnia was the only significant predictor of anxiety symptoms, and maintenance was the only significant predictor of depressive symptoms. Thus, our findings suggest that despite overlap between depression and anxiety, insomnia may have different mechanisms of affecting each disorder. Implications for the treatment of anxiety and depressive symptoms by addressing insomnia problems will be discussed.

SLOW WAVE SLEEP AND PAIN AFTER BEHAVIORAL INSOMNIA TREATMENT IN ADULTS OVER AGE 50 WITH KNEE OSTEOARTHRITIS

Kathi L. Heffner,¹ Kathi L. Heffner¹ Christopher R. France² and Wilfred R. Pigeon¹, *1. University of Rochester Medical Center, Rochester, New York, United States, 2. Ohio University, Athens, Ohio, United States*

Sleep disturbance can aggravate pain, and we recently found that insomnia treatment improved osteoarthritis (OA) pain, lowered inflammation, and improved quality of life in middle-to-older aged adults. Inadequate slow wave sleep (SWS), known as deep or restorative sleep, can decline with aging and is linked to pain and inflammation. We examined how insomnia treatment affects SWS, and the relationship between SWS and pain. In a pilot trial, 33 adults, ages 51 to 74 years with OA-related knee pain and insomnia, were randomized to 6-session CBTi ($n=16$) or a weekly phone contact control group ($n=17$). The CBT-I group showed significantly more laboratory-measured SWS across a study night than controls after controlling for baseline SWS. Greater SWS intensity was associated with lower OA-related pain among the CBT-I group, but not among controls. These preliminary data suggest that behavioral sleep treatment may strengthen the beneficial influence of restorative sleep on pain.

CHANGES OVER TIME IN DAYTIME SLEEPINESS AMONG OLDER ADULTS RECEIVING LONG-TERM SERVICES AND SUPPORTS

Darina V. Petrovsky,¹ Karen B. Hirschman¹ Glenna Brewster² Alexandra L. Hanlon³ Liming Huang,¹ Miranda Varrasse McPhillips,¹ Nancy A. Hodgson,¹ and Mary D. Naylor¹, *1. University of Pennsylvania, Philadelphia, Pennsylvania, United States, 2. Nell Hodgson Woodruff School of Nursing Emory University, Atlanta, Georgia, United States, 3. Virginia Polytechnic Institute and State University, Roanoke, Virginia, United States*

The purpose of this study was to examine the predictors of excessive daytime sleepiness (EDS) over the first two years of long-term services and supports (LTSS) for 470 older adults in assisted living communities (ALCs), nursing homes (NHs), or their homes. Mixed effects linear regression modeling using a backward elimination process was used to build a final multivariable model. In the final model, being female ($p<0.001$) and fewer functional deficits ($p<0.001$) at baseline were associated with decreases in EDS, while higher baseline measures of BMI ($p=0.004$) and number of symptoms ($p<0.001$) were associated with higher EDS. Compared to older adults living in the community and receiving LTSS, those in NHs and ALCs had higher EDS ($p<0.001$). Greater feelings of belonging and depressive symptoms at baseline

were associated with slower rates of increase in EDS over time (both $p < 0.001$). Modifiable predictors of EDS and clinical implications will be discussed.

SESSION 675 (SYMPOSIUM)

STRATEGIES TO PREVENT FRAILTY: THE POWER OF EARLY DETECTION AND TRAINING OF PROFESSIONALS

Chair: Nienke Bleijenberg, *University of Applied Sciences Utrecht, Utrecht, Netherlands*

Discussant: Niek de Wit, *Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Netherlands*

Aging in place is an important goal for both older adults as well as many health policies worldwide, as it is in the Netherlands. Within an aging society, the number of frail older people with complex care needs living at home is increasing. Despite the various definitions of frailty, it is important to early identify who is at risk in clinical practice in order to prevent functional decline, enhance quality of life, and reduce health care costs. Furthermore, an important requirement is effective collaboration between primary care professionals. Various factors are associated with frailty. However, early detection of frailty and its risk factors such as oral health, nutrition and medication related problems is not part of routine care of professionals. To recognize frailty and its risk factors we started a large proactive integrated primary care program that successfully identified frail older people living at home based on routine care data in the Netherlands. After two-year follow-up, a reduction in acute visits at the emergency department was observed. Next, we performed additional studies focusing on early detection and prevention of risk factors of frailty such as oral health, nutrition, and medication related problems among older people living at home. During this symposium we will present the results of the program, followed by our studies that investigated frailty or frailty related risk factors. Additionally, we will show how we enhanced and evaluated the knowledge and skills of professionals working with frail older people in primary care.

A PROACTIVE CARE PROGRAM FOR FRAIL OLDER PEOPLE LIVING AT HOME: A 2-YEAR EVALUATION

Nienke Bleijenberg¹ Jonna Rijkse² Marieke J. Schuurmans³ Niek J. de Wit⁴, 1. *University of Applied Sciences Utrecht, Utrecht, Netherlands*, 2. *Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands*, 3. *Education Center, UMC Utrecht Academy, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands*, 4. *Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Overijssel, Netherlands*

This study presents the long-term evaluation and impact of a proactive primary care program that aims to reduce acute healthcare consumption and preservation of daily functioning of frail older people living at home. For nine years the program has been adapted and evaluated. We present the results of our implementation study with two-year follow-up. 53 general practices (GP) participated.

They provided care to approximately 35000 people aged 65 years and older. Data was extracted from routine primary care data, hospital data and social care data from the municipality. Important outcomes were: number of GP visits, house visits by GP, out-of-hours primary care visits, emergency room (ER) visits, hospital admission, social support, self-sufficiency and wellbeing. After implementing the program, a significant reduction in acute visits (ER and out-of-hour visits) was observed. GP contacts and visits were also significantly increased. The program was well perceived by professionals.

EXPLORING ASSOCIATIONS BETWEEN FRAILTY AND ORAL HEALTH IN COMMUNITY-DWELLING OLDER PEOPLE

Babette Everaars,¹ Katarina Jerković - Čosić,¹

Nienke Bleijenberg¹ Niek J. de Wit² and

Geert j. van der Heijden³, 1. *University of Applied Sciences Utrecht, Utrecht, Utrecht, Netherlands*, 2. *Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands*, 3. *ACTA academisch Centrum Tandheelkunde Amsterdam, Amsterdam, Noord-Holland, Netherlands*

This study explores associations between frailty and oral health in cross-sectional data of 1,202 community-dwelling older people. Two dichotomous outcomes were used: 1. Potential frailty, using routine primary care data; 2. Self-reported frailty, using a questionnaire. Oral health concerned dental record data and self-reported oral problems. Following exploration of univariate associations, age and sex adjusted multivariate logistic regressions were performed. For potential frailty and self-reported frailty associations were found with dental emergency visit (odds ratio (OR)=2.0, 95% confidence Interval (CI)=1.33;3.02 respectively OR=1.58, 95% CI=1.00;2.49), experiencing oral problems (resp. OR=2.07, 95% CI=1.52;2.81 and OR=2.87, 95% CI= 2.07), making dietary adjustments (resp. OR=2.66, 95% CI= 1.31;5.41 and OR=5.49, 95% CI= 3.01;10.01). Additional associations were found for self-reported frailty with wearing dental prosthesis (OR=3.33, 95% CI=1.49;7.44) and missing periodontal information (OR=1.56, 95% CI=1.05;2.32). The cross-sectional data of this study show that in community dwelling older people oral health is associated with frailty.

POTENTIAL CLINICAL CONSEQUENCES OF ADMINISTRATIVE ISSUES REGARDING MEDICATION IN HOME CARE PATIENTS

Nienke E. Dijkstra¹ Carolien Sino² Marieke J. Schuurmans³ Marcel L. Bouvy,² Aline Bouwes,² and Rob R. Heerdink², 1. *University of Applied Sciences Utrecht, Utrecht, Netherlands*, 2. *University of Applied Sciences Utrecht, Utrecht, Utrecht, Netherlands*, 3. *Education Center, UMC Utrecht Academy, University Medical Center Utrecht, Utrecht, Utrecht, Netherlands*

Home care professionals observe drug-related problems (DRPs) as administrative problems (e.g. inconsistent registration of (changes in) drug prescription) and side effects which may have clinical consequences for older patients. This study aims to determine the potential clinical impact of administrative problems. A retrospective descriptive study was performed, using reports of home care professionals of the