from assessing sleep the night before the appointment and determine if this represents a change from their typical sleep pattern.

Categories: Sleep and Sleep Disorders Keyword 1: sleep Keyword 2: inhibitory control Keyword 3: executive functions Correspondence: Laura Nicholson, NorthShore University HealthSystem, Inicholson1@luc.edu

74 Neurobehavioral Symptoms of Dementia as a Risk Factor for Poor Caregiver Sleep Quality

<u>Rylea M Ranum</u>, Andrew M Kiselica, Kimberly O'Leary

University of Missouri, Columbia, MO, USA

Objective: Caregivers to persons with dementia (PWD) consistently report lower sleep quality than non-caregiving controls. Low sleep quality. in addition to being unhealthy for the caregiver, may also impact the quality of care provided to the PWD. One factor that may contribute to poor sleep among caregivers is neurobehavioral symptoms (NBS) of the PWD. NBS, such as mood changes, lack of motivation, and disinhibition, are consistently rated as some of the most distressing symptoms by caregivers. Furthermore, they can include some symptoms related to sleep, such as nighttime wandering and REM sleep behaviors. Prior correlational research indicates a very strong association between NBS of the PWD and sleep quality of the caregiver. However, there are third variables, particularly demographics of the caregiver, which may better explain this relationship. When these variables are controlled in research, findings on the association between PWD NBS and caregiver sleep quality are mixed. Thus, we sought to investigate the relation between PWD NBS and caregiver sleep quality while controlling for caregiver demographics.

Participants and Methods: Fifty caregivers to PWD completed a survey containing the Mild Behavioral Impairment Checklist as a measure of PWD NBS, the Pittsburgh Sleep Quality Index as a measure of caregiver sleep quality, and caregiver demographics. The relationship between PWD NBS and caregiver sleep quality was assessed using hierarchical linear regression. First, we examined the relationship between caregiver demographics (age, gender, income) and caregiver sleep quality. Second, we added NBS to the model to assess for incremental predictive utility by examining change in \mathbb{R}^2 .

Results: A significant correlation was found between PWD NBS and caregiver sleep quality, with higher PWD NBS associated with worse caregiver sleep quality (r(48) = .34, p = .014). A hierarchal regression found that caregiver demographics explained a non-significant proportion of variance in reported caregiver sleep quality (F(3, 44) = 1.05, p = .382, $R^2 =$.07). When PWD NBS was added in model two, there was a significant change in variance explained in the overall model (F(1,43) = 2.65, p = .046, $\Delta R^2 = .13$, $R^2 = .20$). Across both models, PWD NBS was the only variable significantly associated with caregiver sleep quality (B = .08, p = .011).

Conclusions: In line with previous studies, these results indicate a moderate relationship between PWD NBS and caregiver sleep quality. Furthermore, findings suggested that PWD NBS is a risk factor for poor caregiver sleep quality, above and beyond caregiver demographic characteristics. Individuals designing interventions aimed at improving caregiver sleep quality should consider including PWD NBS as an intervention target. Future research should replicate these findings in a longitudinal sample to further evaluate causality.

Categories: Sleep and Sleep Disorders Keyword 1: caregiver burden Keyword 2: sleep Keyword 3: dementia - Alzheimer's disease Correspondence: Rylea Ranum, University of Missouri, rylea.ranum@health.missouri.edu

75 Early Childhood Sleep Quantity, but not Parent-Reported Sleep Problems, Predict Impulse Control in Children at Age 8 years

Sarah E Nigro¹, Dean Beebe¹, James Peugh¹, Kimberly Yolton¹, Aimin Chen², Bruce Lanphear³ ¹Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA. ²University of Pennsylvania, Philadelphia, PA, USA. ³Simon Fraser University, Vancouver, British Columbia, Canada