with empathy (α=0.05). For emotional empathy, caregivers had stronger connectivity between the PCC seed, medial prefrontal cortex, and right supramarginal gyrus, and between the amygdala seed and the right middle frontal gyrus.

CAUSAL MEDIATION OF STRESS REDUCTION IN FAMILY DEMENTIA CAREGIVERS: A FOCUS ON MINDFULNESS

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Although mindfulness therapies have demonstrated benefits for reducing stress and improving psychological symptoms in family dementia caregivers, the mechanisms underlying these salutary effects are unknown. We report a causal mediation pathway to improvement of stress symptoms in family dementia caregivers with Mentalizing Imagery Therapy (MIT), which employs mindfulness and guided imagery tools to reduce stress and improve understanding of self and others. In a randomized controlled trial of short-term 4-week MIT (N=24) versus a psychosocial support group (N=22), MIT demonstrated superior benefit for reducing perceived stress (p=.006). Increased trait mindfulness was a causal mediator of this effect (p=.02). Neuroimaging pre and post intervention found that increased mindfulness was associated with strengthened connectivity of the dorsolateral prefrontal cortex with an emotion regulation network (p<.001). The results are discussed in light of theories of cognitive control and may inform the design of future studies aimed at reducing family caregiver stress.

DEMENTIA FAMILY CAREGIVERS' AMBIVALENT FEELINGS AND CARDIOVASCULAR RISK: LONGITUDINAL CORRELATES

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Cross-sectional data show that caregivers' ambivalent feelings are associated with psychological distress. The association of ambivalent feelings with caregivers' cardiovascular risk has not been studied. For this purpose we analyzed preliminary data from the Spanish Longitudinal Caregiving Spanish Longitudinal Study (CUIDA-LONG). One-year follow-up data were available for 96 dementia family caregivers. The following variables were assessed: sociodemographics, body mass index (BMI), disruptive behaviors, ambivalence, depressive symptomatology and cardiovascular risk with the inflammatory biomarker C-reactive protein (CRP). A hierarchical regression model was tested. Sociodemographic variables and change over time in stressors, ambivalence and depression were entered as predictors of change in CRP. 27% of the variance in CRP was explained through the model. More time since being a caregiver, higher BMI and greater increase in ambivalence contributed significantly to an increase in CRP. Ambivalent feelings contribute significantly to the cardiovascular risk of those who care for a relative with dementia.

AN INTENSIVE LONGITUDINAL STUDY OF THE ASSOCIATION OF STRESS WITH HYPERGLYCEMIA USING REAL-TIME DATA COLLECTION

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Caregivers of persons with dementia (PWD) are at significantly elevated risk for cardiovascular disease (CVD)s. A higher risk for diabetes is one potential mechanism of morbidity in caregivers. Diabetes has been associated with dyslipidemia, hypertension, oxidative stress, increased low-grade inflammation, and endothelial dysfunction, which all place individuals at risk for CVD. Elevated blood glucose, even in the nondiabetic range, is a significant risk marker for the development of CVD. The current study examined the semi-continuous association between stress and glucose. Participants wore a continuous glucose monitor that measured blood glucose every 5 minutes for a period of 10 days (n = 2,880/participant). Ecological Momentary Assessment (EMA) was used to measure stress, positive affect, negative affect, and dietary intake 3x/day over the 10-day period. Hierarchical linear models indicated significant within-person associations between stress and blood glucose levels (t = 3.88, df = 3.92, p = .018; R2 = 26.2%).

DAILY CORTISOL TOTAL OUTPUT MEDIATED SLEEP AND AFFECT AMONG DEMENTIA FAMILY CAREGIVERS

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Cortisol is a primary stress hormone associated with sleep. We examined daily cortisol as the potential mechanism linking prior night's sleep and daily mood among 173 dementia family caregivers (M (SD) age = 61.97 (10.66)) who used adult day services (ADS) at least two days a week. Caregivers self-reported sleep characteristics (bed and wake time, sleep quality, care receiver's night-time problems) and affect (anxiety, depressive symptoms) across eight consecutive ADS/non-ADS days. Salivary cortisol was collected five times each day. Multilevel mediation analysis suggested that daily cortisol total output (assessed as "area under the curve") mediated prior nights' total time in bed and daily anxiety, but only on high-stress (non-ADS) days. Mediation was non-significant on low-stress (ADS) days, and at the between-person level. ADS use is respite from a chronically stressful role. Reducing exposure to stress via respite may protect against harmful processes related to sleep, cortisol reactivity, and daily anxiety.

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Ageism (BSS Paper)

AGE DISCRIMINATION DURING THE COVID-19 PANDEMIC: ASSOCIATIONS WITH DAILY WELL-BEING

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