

Dementia care research (research projects; nonpharmacological)/Family/Lay caregiving

“I understand a fury in your words, but not the words”: The association of dementia caregiving styles and salivary cortisol

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Amanda N Leggett, University of Michigan, Ann Arbor, MI, USA.

Email: leggetta@med.umich.edu**Abstract**

Background: Dysregulated cortisol patterns are indicators of physiological stress and may show evidence that caregiving for a person living with dementia (PLwD) can get under the skin. While the stress process of caregiving has been well observed, less attention has focused on the cognitive-behavioral care management styles of dementia caregivers and how they may impact care outcomes such as physiological stress. Prior work by this team has identified five distinct caregiving styles through qualitative analysis of an interview regarding caregivers' cognitive-behavioral care management approach: “Externalizers” (superficial understanding, self-focused, expressions of anger or frustration), “Individualists” (provide care by going it alone, emotionally removed), “Learners” (recognize need to change approach but are stuck, emotionally turbulent), “Nurturers” (positive affect and empathy, reflect natural mastery), and “Adapters” (arsenal of acquired management strategies, adapt to challenges). We hypothesize that more maladaptive care styles (e.g. Externalizers, Learners) will show evidence of dysregulated cortisol patterns.

Method: Participants included 100 primary family caregivers for PLwD who were 74% female, 18% non-White, and on average 64 years old. Saliva was collected via passive drool method over two days. Two markers of salivary cortisol, area under the curve (AUC), and cortisol awakening response (CAR) were examined as separate outcomes in linear regressions, with caregiving styles as the key predictors (Nurturers as the reference group), and demographic characteristics, caregiver burden, depression, and sleep disturbance as covariates.

Result: Accounting for controls, having an Externalizer caregiving style was significantly associated with an elevated cortisol output (greater AUC), relative to having a Nurturer care style ($\beta=0.33, p<.05$). There was also a trend towards greater caregiver depression and larger AUCs ($\beta=0.31, p=.059$). Caregiving style was not significantly associated with the CAR.

Conclusion: Having an Externalizing care style characterized by expressions of anger, frustration, and lack of understanding of dementia is associated with an elevated cortisol pattern. This dysregulated pattern may put Externalizers at increased risk for a

number of physical and mental health conditions relative to other caregiving styles. Assessing caregiving style in addition to care stressors may help identify caregivers in need of targeted intervention and help prevent negative health outcomes.