Providing care for an older relative with dementia has been found to be highly stressful, and the caregiving experience may erode caregivers’ psychological well-being as well as physical health (Aneshensel, Pearlin, Mullan, Zarit, & Whitlatch, 1995). In this dissertation, I propose to explore the consequences of family caregiving as pertain to caregiver health and well-being at both the within and between-person levels.

The dissertation compiles three studies that utilize data from the Daily Stress and Health (DaSH) Study. DaSH has a within-person single-group design using daily diary methods with 184 caregivers. At baseline, there was an in-person at-home interview, followed by 8 dairy days. Caregivers filled out daily dairies on these 8 consecutive days; they were also interviewed by phone in each of the 8 evenings to report their daily experiences. On some of the dairy days, the individual with dementia (IWD) was attending day care; and on the rest of them, the caregiver was actively caring for the IWD. Saliva samples were collected 5 times on each diary day; these
samples were used to test for levels of 3 hormones related to the stress process: the cortisol, DHEA-s, and alpha-amylase. Each hormone was hypothesized to have unique implications for caregiver health. Patients’ behavior stressors were also reported each day for 4 time periods, which corresponded to the timing of Adult Day Services (ADS) use. There were two longitudinal follow-up interviews by telephone: at 6 month and 12 month that assessed the caregivers’ continuing ADS use, health, and well-being. DaSH provides a unique opportunity to look at the complex associations between daily experiences, caregiving, ADS use, and biological functioning from a daily diary, within-person approach.

The three studies examine the effects of stress on affect, health, and biomarkers in a sample with high levels of daily stressors; they also examine how an intervention, ADS use, that changes daily stressor exposures influences caregivers’ daily health and well-being. Study 1 examines three spline growth models fit to daily cortisol levels, and the effect of ADS use on diurnal cortisol regulations in the daily caregiving context. Study 2 examines the typical diurnal trajectory of salivary alpha-amylase (sAA) using a piecewise linear spline model. It also examines the effect of ADS use on diurnal sAA regulation in the context of daily experiences. Last, study 3 uses growth curve models to explore the association between caregivers’ daily stress biomarker responses and their long-term health. This study incorporates data collected using different time scales, and uses multiple health indicators and biomarkers. It explores the moderating effects of ADS use and caregiving transitions on the biomarker-health associations.

Overall, the findings suggest the subtleties of health disparity among caregivers of IWDs. Further, ADS use is effective in containing the chronic stress and physiological toll of caregiving on a daily basis and over time. The studies provide some scientific evidence for promoting caregiving respite programs.