

POSTER NO.  
P2-061



UNIVERSITY OF MIAMI  
MILLER SCHOOL  
of MEDICINE

## RISK APPRAISAL OF ALZHEIMER'S CAREGIVERS: THE DEPRESSION CONNECTION

Zelde Espinel MD MA MPH,<sup>1</sup> Elizabeth A. Crocco MD,<sup>1</sup> Janice Rios MD,<sup>1</sup> Ivan Escobar,<sup>2</sup> Jehan Helmi MD,<sup>1</sup> David Loewenstein PHD<sup>1</sup>

<sup>1</sup>: University of Miami Memory Disorders Clinic (UM-MDC), Department of Psychiatry and Behavioral Sciences, University of Miami Miller School of Medicine, Miami FL, USA; <sup>2</sup>: Universidad del Valle, Cali, Colombia  
The UM-MDC is partly supported by the State of Florida Department of Elder Affairs (XZ203), Alzheimer's Disease Initiative (ADI)

### Abstract 2455

**Introduction.** The role of caregivers for patients with Alzheimer's disease and related dementias (ADRD) is life-changing and frequently associated with a negative impact on caregiver physical and psychological health, including symptoms of clinical depression.<sup>1-5</sup> Given the intensity and chronicity of demands placed on the caregiver, some ADRD patients may be neglected, left unsupervised and at risk of harm, or abused by caregivers.<sup>2</sup> This study examines caregiver symptom levels of depression in relation to 1) perceived stress and strain, 2) temptation to abuse, and 3) neglect of care recipient safety.

**Methods.** Surveys were conducted with 77 caregivers of ADRD patients evaluated at the University of Miami Memory Disorders Clinic in Miami, Florida. Caregivers completed the Center for Epidemiological Studies Depression Scale (CES-D) to assess symptoms of depression and a risk appraisal instrument describing care recipient characteristics. Three risk appraisal items assessed caregiver stress and strain (Figure 1), 2 items measured temptation to abuse (Figure 2), and 2 items examined neglect of care recipient safety (Figure 3). CES-D depression symptoms were examined in relation to 1) temptation to abuse, 2) neglect of care recipient safety, and 3) caregiver stress and strain (Table 2). Caregiver stress and strain were examined in relation to 1) temptation to abuse and 2) neglect of care recipient safety (Table 2).

**Results.** The rate of caregiver depression, assessed by CES-D > 16, was found to be 34% in our study sample. Caregiver depression and caregiver stress and strain were positively correlated ( $r = 0.42$ ;  $p < .001$ ). Both caregiver depression and caregiver stress and strain independently predicted temptation to abuse ( $r = 0.39$ ;  $p < .001$  and  $r = 0.47$ ;  $p < .001$ ) but were not related to neglect of care recipient safety.

**Discussion.** In the United States, 15 million adults are providing care for a person with ADRD.<sup>1</sup> Caregiving for Alzheimer's patients becomes increasingly burdensome with time.<sup>4,5</sup> As Alzheimer's symptoms progress, caregiving tasks become more frequent, time consuming, and physically demanding.<sup>2</sup> Cognitive deterioration, often accompanied by lack of recognition of caregiver identity, compounded by verbal and physical aggression, intensifies caregiver stress.<sup>3,5</sup> Not surprisingly, caregivers frequently develop symptoms of depression and experience stress and strain.<sup>3,4,5</sup> In this study, caregiver depression symptoms and caregiver stress and strain were strongly associated and these two measures were positively associated with elevated risk for temptation to abuse as measured by caregiver self-reports.

**Conclusions.** The current study suggests that caregivers of ADRD patients are at risk for role-related depression symptoms and perceived stress and strain; in turn, both measures predict higher likelihood that the caregivers report temptation to abuse the care recipient.

**Table 1: ADRD Caregivers: Demographic Characteristics (n=77)**

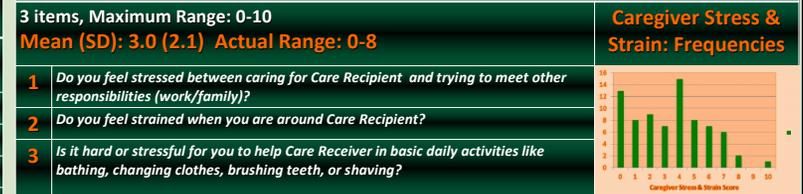
Demographic Characteristic		No.	%
Caregiver Relationship to Care Recipient	Child	38	49%
	Spouse	30	39%
	Sibling	3	4%
	Other	6	8%
Living with Care Recipient		53	69%
Caregiver Race/ethnicity	Hispanic	49	58%
	White, Non-Hispanic	22	29%
	Afro-American	4	5%
	Other	6	8%
Caregiver Age	Mean: 76.3	SD: 8.3	Range: 56-91

**Table 2: Correlations among Scaled Measures (n=77)**

	Caregiver Stress & Strain	Temptation to Abuse	Neglect of Patient Safety
CES-D Score	0.42***	0.39***	-0.123 NS
Caregiver Stress & Strain	NA	0.47***	0.05 NS

\*\*\*  $p < .001$   
NS: Not significant

**Figure 1: Caregiver Stress & Strain**



**Figure 2: Temptation to Abuse**



**Figure 3: Neglect of Care Recipient Safety**



#### References

1. Alzheimer's Association. 2015 Alzheimer's Disease Facts and Figures. Alzheimer's & Dementia 2015;11(3):332.
2. Cooper C, Blanchard M, Selwood A, Walker Z, Livingston G. Family Carers' Distress and Abusive Behavior: Longitudinal Study. The British Journal of Psychiatry. 2010;196(6):480-485.
3. Czaja S, Gitlin L, Schulz R, Zhang S, Burgio LD, Stevens A et al. Development of the Risk Appraisal Measure: A Brief Screen to Identify Risk Areas and Guide Interventions for Dementia Caregivers. Journal of the American Geriatrics Society. 2009;57(6):1064-1072.
4. Ornstein K, Gaugler JE, Zakodnie L, Stern Y. The Heterogeneous Course of Depressive Symptoms for the Dementia Caregiver. The International Journal of Aging and Human Development. 2014;78(2):133-148.
5. Smith G, Williamson G, Miller L, Schulz R. Depression and Quality of Informal Care: A Longitudinal Investigation of Caregiving Stressors. Psychology and Aging. 2011;26(3):584-591.