



Carer Strain is Associated with Activities of Daily Living in People with Cognitive Impairment

Burgon. C.^{1,2}, Van der Wardt. V.¹, Goldberg. S.², Bajwa. R. K.¹, Harwood. R.H.^{2,3}

1.Division of Rehabilitation and Ageing, University of Nottingham, UK. 2.School of Health Sciences, University of Nottingham, UK. 3.Nottingham University Hospitals, UK

Introduction

Carer strain is associated with

increased risk of:

- • Depression¹
- • Social isolation¹
- • Institutionalisation (of care recipient)²

People with dementia have impaired Activities of Daily Living (ADLs)³.

People with worse ADLs may need more support.

This could affect carer strain.



This study aimed to assess the relationship between ADLs & carer strain in people with dementia & MCI.

Method

Carers rated their caring-related strain and patient's ADL. The relationship between carer strain (Carer Strain Index⁴) and ADLs (Disability Assessment for Dementia [DAD]⁵) was explored whilst controlling for factors previously

associated with carer strain^{1,6}.

Hierarchical linear regression:

Step 1:



Carer gender



Spousal status (i.e. whether the carer was a spouse)



Carer age



Co-residency status (i.e. whether the carer lived with the patient)

Step 2:



ADLs

	B	SE B	β
Step1			
Constant	1.30	8.35	
Age	-0.05	0.07	-.18
Gender	0.80	1.13	.12
Co-resident carer	2.10	2.11	.17
Spousal status	0.85	2.28	.10
Step 2			
Constant	14.03	8.73	
Age	-0.09	0.07	-.33
Gender	0.28	1.05	.04
Co-resident carer	0.72	1.97	.06
Spousal status	-.03	2.11	-.03
ADL (DAD score)	-.07	.02	-.45*

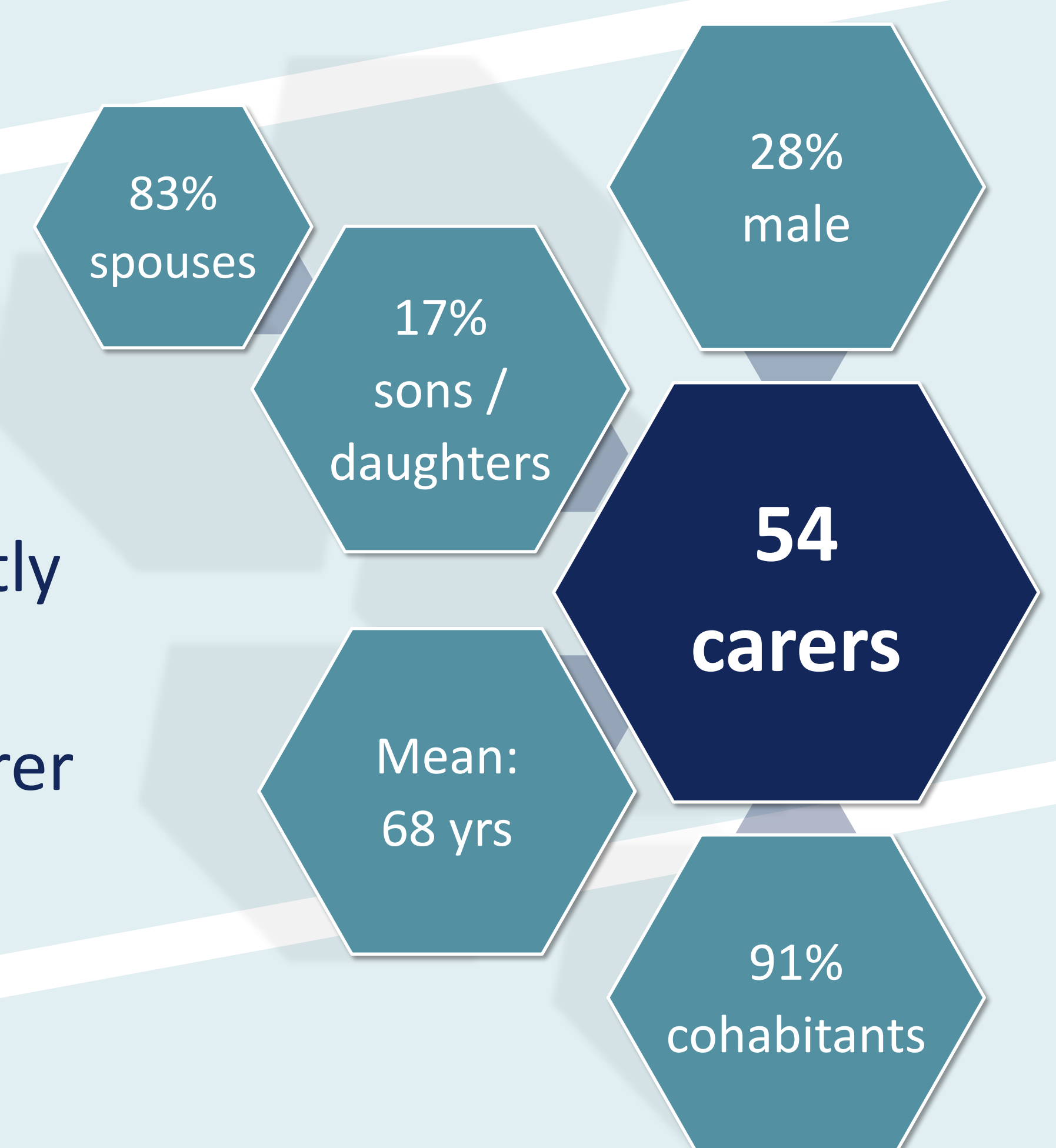
Step1:
R² = .08

Step 2:
Change in
R² = .18

*p<.01

Results

Worse ADL was significantly associated with more carer strain when controlling for carer age, gender, co-residency, and spousal status.



Key conclusions

- Carer strain is significantly and independently associated with worse ADL in people with cognitive impairment.
- Although causation cannot be established and results may not be representative, future research should examine whether benefits to ADLs following interventions lead to reduced carer strain.
- Qualitative interviews with carers could shed light on this association.

References: 1. Adelman, R.D., Tmanova, L.L., Delgado, D., Dion, S. and Lachs, M.S., 2014. Caregiver burden: a clinical review. *Jama*, 311(10), pp.1052-1060. ; 2. Toot, S., Swinson, T., Devine, M., Challis, D. and Orrell, M., 2017. Causes of nursing home placement for older people with dementia: a systematic review and meta-analysis. *International Psychogeriatrics*, 29(2), pp.195-208; 3. Giebel, C.M., Sutcliffe, C. and Challis, D., 2015. Activities of daily living and quality of life across different stages of dementia: a UK study. *Aging & Mental Health*, 19(1), pp.63-71. ; 4. Robinson, B.C., 1983. Validation of a caregiver strain index. *Journal of gerontology*, 38(3), pp.344-348. ; 5. G  linas, I., Gauthier, L., McIntyre, M. and Gauthier, S., 1999. Development of a functional measure for persons with Alzheimer's disease: the disability assessment for dementia. *American Journal of Occupational Therapy*, 53(5), pp.471-481. ; 6. Kim, H., Chang, M., Rose, K. and Kim, S., 2012. Predictors of caregiver burden in caregivers of individuals with dementia. *Journal of advanced nursing*, 68(4), pp.846-855.

