

WEB MATERIAL

Assessing the Role of Selection Bias in the Protective Relationship Between Caregiving and Mortality: the Caregiver-Study of Osteoporotic Fractures

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Web Table 1. Characteristics (%) of caregivers and noncaregivers in a propensity-score-matched sample ($n = 1,406$), Baltimore, Maryland; Minneapolis, Minnesota; Monongahela Valley, Pennsylvania; and Portland, Oregon; 1997–2009

	Caregiver ($n = 476$)	Noncaregiver ($n = 930$)	Standardized Difference
Site			
Baltimore	32.1	32.8	-0.01
Minnesota	32.4	31.4	0.02
Pittsburgh	19.3	19.4	0.00
Portland	16.2	16.5	-0.01
Age, years ^a	81.3 (3.7)	81.3 (3.7)	-0.03
White race	88.5	89.7	-0.04
Education (>12 years)	58.0	58.6	-0.01
Married	56.1	54.7	0.03
Needing help with ≥ 1 I/ADL	36.8	36.5	0.01
Functioning better than median ^a			
Chair stand time	43.9	44.2	-0.01
Usual walking speed	60.5	62.4	-0.04
Grip strength	56.3	55.3	0.02
Mental status	73.5	73.7	0.00
Usual walking speed ≥ 1 m/sec ^b	38.2	41.1	-0.06
Parkinson disease	0.8	0.5	0.04
Emphysema/chronic obstructive pulmonary disease	10.5	9.6	0.03
Heart disease	9.0	8.7	0.01

Abbreviations: ADL, activities of daily living; IADL, instrumental activities of daily living; SOF, Study of Osteoporotic Fractures.

^a Values for age are expressed as mean (standard deviation).

^b Participants who were unable to complete functional performance measures were considered to have below median functioning, walking speed < 1 m/sec.

Web Table 2. Relationship between caregiving status and mortality, and magnitude of association of a hypothetical confounder with caregiver status and death needed to make the association null (e-value), Baltimore, Maryland; Minneapolis, Minnesota; Monongahela Valley, Pennsylvania; and Portland, Oregon; 1997–2009

Caregiver-SOF Sample Construction	No. in Sample^a	Deaths^b, %	aHR^a	95% CI	e-Value for aHR
Initially screened	4,036	36.6	0.83	0.73, 0.95	1.53
Recontacted subset	3,368	35.9	0.84	0.73, 0.96	1.51
Rescreened subset	2,731	42	0.84	0.74, 0.97	1.51
Eligible subset	2,143	42.9	0.73	0.62, 0.87	1.79
Invited subset	1,449	40.5	0.74	0.61, 0.89	1.77
Caregiver-SOF	1,069	38.6	0.71	0.57, 0.89	1.85
Alternative sample					
Propensity-score-matched sampled	1,406	36.6	0.77	0.64, 0.93	1.69

Abbreviations: aHR, adjusted hazard ratio; IADL, instrumental activities of daily living; SOF, Study of Osteoporotic Fractures.

^a Between 0.6% and 1.2% of the samples were missing data on one or more covariates, and were thus excluded from the analysis.

^b Adjusting for age at start of follow-up, race, education level, SOF site, IADL impairments, and physical and cognitive performance measures.

^c For the initially screened, recontacted subset, and rescreened subset, modeling caregiving status at initial screening and death within 10 years of initial screening. for the eligible subset, invited subset, caregiver-SOF, and propensity-score-matched sample, modeling caregiving status at rescreening and death within 10 years of rescreening.

^d No additional covariates are adjusted for in the fully adjusted model.