Older adults who reported strain when caring for a spouse with disabilities had increased mortality

Schulz R, Beach SR. **Caregiving as a risk factor for mortality. The Caregiver Health Effects Study.** JAMA. 1999 Dec 15;282:2215-9.

QUESTION

Do older adults who care for a spouse with disabilities have an increased risk for mortality?

DESIGN

Cohort study with mean follow-up of 4.5 years (Caregiver Health Effects Study, part of the Cardiovascular Health Study).

SETTING

4 communities in the United States.

PARTICIPANTS

819 older adults (mean age 80 y, age range 66 to 96 y, 51% women, 90% white) who were living with their spouses. 392 were caregivers of a spouse who had difficulties with ≥ 1 activity of daily living or instrumental activity of daily living because of physical or health problems or problems with confusion. 427 were noncaregivers (their spouses did not have these difficulties). Participants were drawn from a larger cohort study with inclusion criteria of ≥ 65 years of age and plans to live in the study area for 3 years. Exclusion criteria were being wheelchair-bound in the home, being unable to attend evaluations, or treatment for cancer. Follow-up for mortality was 100%.

ASSESSMENT OF RISK FACTORS

Baseline data were collected on sociodemographic factors (age, sex, race, education, and stressful life events), cardiovascular health status (prevalent disease, subclinical disease, or no disease), and caregiving status (spouse not disabled [referent group], not helping disabled spouse, helping disabled spouse with no self-reported emotional or physical strain, and helping disabled spouse with strain).

MAIN OUTCOME MEASURE

All-cause mortality.

MAIN RESULTS

During follow-up, 103 participants died (16% in the groups with a disabled spouse and 9% in the group whose spouses were not disabled). After adjustment for sociodemographic factors and cardiovascular health status, caregivers who reported strain had a higher rate of all-cause mortality than did persons living with a nondisabled spouse; the other 2 groups (caregiving without strain or living with a disabled spouse but not providing care) did not have higher mortality. Age, sex, race, and prevalent disease were associated with increased risk for all-cause mortality (Table).

CONCLUSION

Older adults who provided care for a disabled spouse had an increased risk for all-cause mortality if the caregiving was associated with physical or emotional strain.

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Baseline caregiving status, sociodemographic factors, and cardiovascular health status associated with all-cause mortality in older adults who were living with a disabled spouse

Baseline variable	Relative risk adjusted for baseline factors (95% CI)
Helping spouse and caregiving strain	1.63 (1.00 to 2.65)
Helping spouse but no reported strain	1.08 (0.61 to 1.90)*
Not helping disabled spouse	1.37 (0.73 to 2.58)*
Age (per year)	1.10 (1.06 to 1.14)
Sex (men vs women)	1.88 (1.23 to 2.88)
Race (black vs white)	2.00 (1.03 to 3.89)
Prevalent disease at baseline	3.30 (1.79 to 6.08)

*Not significant.

COMMENTARY

Caregiving has long been associated with psychological and physical morbidity, but the study by Schulz and Beach is the first to identify a link between caregiving and mortality. The authors studied older adults living with their spouses, and the definition of caregiving hinged on the disability of the spouse rather than on the provision of help by the participant.

In an accompanying editorial, Kiecolt-Glaser and Glaser (1) point out the potential for underestimation of mortality risk because of the broad definition used for caregiving and because caregiving status was identified only at baseline. They also highlight the complex interplay between physical health and depression and the particular disadvantages faced by caregiving spouses who have to cope simultaneously with an ill person in the house, the loss of a partner's support, and a reduction in opportunity to seek support elsewhere.

No details are given of spouses' illnesses, and participants' perception of who cares for whom seems based on comparison of their own and their spouses' illness to determine who is "less ill" or "more able." We may assume that caregivers with cardiovascular disease who rate themselves as "helping" are likely to have spouses with profound disabilities or terminal illness.

The need to focus care planning on the *couple* is emphasized in both the article and the editorial. To do this, the interaction between both partners must be considered rather than the simple summation of individual needs. Health and social care providers may need to instigate changes in conceptual frameworks used for assessment and intervention. For example, they may need to consider interpersonal or systemic models and changes in organizational procedures, such as cross-referencing of records, before couple-focused planning can be successful.

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Reference

1. **Kiecolt-Glaser JK, Glaser R.** Chronic stress and mortality among adults [Editorial]. JAMA. 1999;282:2259-60.

