The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 2025, **80(9)**, gbaf135
https://doi.org/10.1093/geronb/gbaf135
Advance access publication 25 July 2025
Special Issue: Palliative and End-of-Life Care in Aging: Research Article

Social relationships and end-of-life quality among older adults in the United States: the impacts of marital, kinship, and network ties

Kafayat Mahmoud, PhD[1] and Deborah Carr, PhD[1,2,*]

[1]Center for Innovation in Social Science, Boston University, Boston, Massachusetts, United States
[2]Department of Sociology, Boston University, Boston, Massachusetts, United States

*Address correspondence to: Deborah Carr, PhD. Email: carrds@bu.edu

Decision Editor: Kenzie Latham-Mintus, PhD, FGSA (Social Sciences Section)

Abstract

Objectives: We examine marital status differences in recent decedents' end-of-life care and gender differences therein, and the role of other social ties (children, siblings, and network members) in influencing the quality of end-of-life care.

Method: Data are from 12 waves (2011–2022) of the National Health and Aging Trends Study. We use binomial and multinomial logistic regression to evaluate the effects of marital status and other social ties on ten distinct dimensions of care in the last month of life, reported by proxies of deceased study participants. Outcomes were overall quality of care; adequately treated breathing problems, pain, and sadness/anxiety; care coordination; decisions made with patient input; care concordant with patient wishes; informed about care; personal care needs met; and respectful treatment. Models were adjusted for sociodemographic, health, and proxy characteristics.

Results: Divorced decedents fared poorly on multiple outcomes; they were less likely than married or widowed persons to receive excellent care and have personal care needs met. Divorced and widowed decedents were less likely to receive respectful treatment relative to married decedents. We found no significant gender differences in these patterns. Persons with more siblings and network members had superior pain management.

Discussion: Our results offer modest support for marital control and compensatory frameworks; no particular social tie is uniformly protective at the end of life. Health care providers should help dying patients identify significant others who can best participate in end-of-life preparations and care. Hospital patient advocates also could aid those who lack close kin at the end of life.

Keywords: Dying, Pain, Marriage, Singlehood, Social support

Over 3 million persons in the United States die annually, with roughly 80% of these deaths befalling adults ages 65 and older. Most older adults die following protracted periods of chronic illness, including cancer, cardiovascular and cerebrovascular diseases, and dementia (Ahmad et al., 2024). Their final days and weeks may involve physical and emotional distress, impaired decision-making capacity, and the receipt of intrusive treatments that do not align with the wishes of the dying patient and their family (Carr & Luth, 2019). Health care systems and family caregivers face intensifying challenges in their efforts to provide a "good death" for the patient. A good death is described as "free from avoidable distress and suffering for patient, family and caregivers, in general accord with the patient's and family's wishes, and reasonably consistent with clinical, cultural and ethical standards" (Institute of Medicine, 2015).

Extensive research documents that patient characteristics (e.g., socioeconomic status) and contextual factors (e.g., hospice use) are associated with death quality (Carr & Luth, 2019). However, we are unaware of studies examining the extent to which marital status and other social ties affect end-of-life experiences. End-of-life care is *inherently relational*; dying older adults rely primarily on spouses, but also children, siblings, and other network members for decision making, advocacy, and other supports that may reduce their suffering and enhance quality of care (Kalousová & Carr, 2024; Ornstein et al., 2017; Plick et al., 2021). We use the National Health and Aging Trends Study (NHATS) data to explore how marital status and the presence of children, siblings, and other network ties affect multiple dimensions of end-of-life care quality, reported retrospectively by proxies of deceased participants. Our results can inform policies and practices regarding the receipt of respectful and well-coordinated end-of-life care that aligns with the wishes of dying older adults and their families.

Background

Chronic illnesses are the leading causes of death in the contemporary United States. As such, the interval between the onset of illness and death may last for weeks, months, or even years (Carr & Luth, 2019). Dying patients may experience protracted spells of physical and mental distress that require coordinated medical management. Patients and family members

Received: January 1 2025; Editorial Decision Date: July 15 2025.

© The Author(s) 2025. Published by Oxford University Press on behalf of the Gerontological Society of America. All rights reserved. For commercial re-use, please contact reprints@oup.com for reprints and translation rights for reprints. All other permissions can be obtained through our RightsLink service via the Permissions link on the article page on our site—for further information please contact journals.permissions@oup.com.

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

require clear information from their health care providers to make educated treatment decisions (IOM, 2015). Family members coordinate care, advocate for the patient, and negotiate treatment decisions—tasks that may be complicated by the distress of watching a loved one suffer as they approach death (Carr & Luth, 2019).

Attaining a "good death" is an *inherently relational process*. Although early writings on end-of-life care emphasized individual-level "autonomy" and "patient-centered" approaches (IOM, 1997), more recent policy and clinical recommendations emphasize "family-oriented" approaches (IOM, 2015). Two-thirds of older adults facing end-of-life treatment choices are incapable of making these decisions themselves, underscoring the need to engage family in decision making and advocacy (Kalousová & Carr, 2024; Ornstein et al., 2017). However, rising numbers of adults in the United States are aging without a spouse, child(ren), siblings, or other social ties that may facilitate a "good death" (US Department of Health and Human Services, 2023). Thus, we examine the influences of marital status (married, remarried, divorced, widowed, and never married) and number of children, siblings, and other social ties on ten proxy-reported end-of-life outcomes, encompassing domains including overall quality, symptoms and symptom management, care coordination, and respectful care.

Marital status and end-of-life experiences

Understanding partnership status differences in end-of-life experiences is a timely goal, given increasing heterogeneity in the marital lives of older adults in the United States. Rising divorce rates starting in the 1970s, combined with increasing rates of "gray divorce" (i.e., divorces that occur among persons ages 50 and older) in the 1990s and 2000s, mean that a growing share of older adults are currently divorced, or have remarried following the dissolution of a prior marriage (Brown & Lin, 2022). Rates of lifelong singlehood are low (6.7% of men and 6.4% of women ages 65 and older in 2020), yet these proportions have risen steadily across birth cohorts (Census Bureau, 2022). Married persons tend to enjoy superior health behaviors, health care, and physical, emotional, and cognitive health relative to their unmarried counterparts (Carr & Springer, 2010; Cornwell & Waite, 2012; Liu et al., 2020; Rendall et al., 2011). They also have higher-quality encounters with health care systems, including timely care, shorter hospital stays, and access to better quality facilities (Carr & Springer, 2010).

The superior health outcomes of married persons reflect social selection and causation processes. Social selection frameworks propose that socioeconomic resources and good health render one more likely to marry and remain married; these resources also have positive impacts on health and well-being (Waldron et al., 1996). Social causation frameworks counter that marriage provides instrumental, financial, and psychosocial benefits that enhance health and health behaviors, whereas unmarried persons lack these health-enhancing benefits (Carr & Springer, 2010). Marital control perspectives specify that marriage protects health through processes of social support and oversight; spouses monitor and influence their partner's health behaviors (Umberson et al., 2018). They can be a "decision partner" in health care encounters, serving as a patient advocate and "hub of information" when decisions are required (Gray et al., 2019). Thus, we expect that married decedents will have superior end-of-life outcomes relative to unmarried decedents, with greater benefits for those in their first marriage versus a remarriage, given research suggesting that remarriage is an "incomplete institution" that does not provide the same structural and interpersonal supports as a first marriage (Cherlin, 1978).

However, unmarried persons are diverse, comprising widowed, divorced, and never married persons. Each subgroup may have particular (dis)advantages that are consequential for end-of-life outcomes. Widowed and divorced persons have lost spousal supports and thus may require readjustment, whereas never married older adults never had this support (Carr & Springer, 2010). Accordingly, never-married older adults tend to be pro-active in forming and maintaining relationships, which help them manage health-related challenges (Sarkisian & Gerstel, 2016). These ties may serve an important support or advocacy function at the end of life. Never married persons also may develop self-sufficiency that enables them to secure high-quality health care and symptom management at the end of life (Roth & Peng, 2022).

Widowed and divorced persons, by contrast, can no longer depend on their former spouse for support, assistance, or advocacy at the end of life. However, the specific context of their union dissolution may shape their end-of-life experiences. Widowed older adults might have acquired knowledge or skills in arranging their own end-of-life care after witnessing and navigating their late spouse's experiences (Carr, 2012). Divorced persons, conversely, face a range of disadvantages relative to their married, never married, and widowed peers, including fewer economic resources, poorer health, and weaker ties with other family members—with divorced men especially likely to have tenuous ties with children (Lin & Brown, 2021; Sbarra & Whisman, 2022; Shapiro & Cooney, 2007). These disadvantages may undermine the quality of their end-of-life experiences. Thus, we expect that divorced persons will fare worse than married persons at the end of life, and will also evidence poorer outcomes compared to their never married and widowed counterparts.

Gender, marital status, and end-of-life experiences

The extent to which marital status affects decedents' end-of-life experiences may differ for men and women. Theoretical writings underscore that cultural norms regarding gender organize social relationships and shape behavior (Ridgeway, 2009). The *gender-as-relational* framework suggests that gender relations are "dynamic and situational" and vary based on contextual factors like marital status (Springer et al., 2012, p. 1661). For instance, married men tend to rely exclusively on their wives for health-enhancing supports, whereas married women turn to a broader network of supports (Umberson et al., 2018). Divorce has a more powerful detrimental effect on the social and intergenerational ties of men than women (Shapiro & Cooney, 2007). Women are more likely than men to become widowed, so widows have a larger pool of peers from whom they can receive guidance regarding end-of-life challenges (Silverman, 2004). Never married women (but not men) tend to be especially strategic and self-reliant, enlisting paid supports or distant social ties to manage aging-related challenges (DePaulo, 2023). Thus, we expect that the protective effects of

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

marriage on end-of-life experiences will be consistently larger for men than women.

Non-marital ties and end-of-life experiences

Relationships beyond marriage also may affect end-of-life care. Adult children often care for their dying parents (e.g., Ornstein et al., 2017). Siblings, distant relatives, and friends provide emotional and instrumental supports that could enhance older adults' end-of-life care. Convoy models of social relationships propose that people maintain close ties over the life course, yet invoke different ties at different times, often in response to personal changes, including the deaths of core network members like a spouse (Fuller et al., 2020). Compensatory frameworks elaborate that older adults maintain a hierarchy of preferences regarding their support networks, contingent on availability. Most older adults prefer to rely on a spouse, followed by an adult child, sibling, another relative, friends, and other members of one's network (Rook & Schuster, 1996). Thus, we evaluate the extent to which children, siblings, and close confidantes affect end-of-life outcomes. In sum, our study can identify how the absence of particular social ties may render one vulnerable to disadvantageous end-of-life outcomes, and inform policies and practices regarding the receipt of patient-centered end-of-life care.

Method

Data

We use 12 waves of data (2011–2022) from the NHATS, a nationally representative U.S. sample of Medicare beneficiaries ages 65 and older (Kasper & Freedman, 2020). The NHATS collects data on participants' demographic, family, financial, and health characteristics and last month of life data from proxy respondents who were familiar with the respondent's end of life. NHATS had an initial enrollment of 8,245 participants in Wave 1, and oversampled the oldest-old (80+) and non-Hispanic Black older adults.

Our analytic sample is limited to deceased NHATS participants for whom a proxy completed the last month of life interview. The 12 pooled waves include self-reported characteristics at the final wave in which the respondent participated prior to their death, and proxy-reported end-of-life appraisals obtained roughly 7–12 months after the death, yielding a total of 39,012 observations. The sample size for each of our outcome measures differs because of varying levels of missing data, ranging from 3% for overall care quality ($n = 37{,}836$) to 39% for pain management ($n = 23{,}688$). Levels of item-specific missing data for respondent-reported covariates ranged from 0% for race and gender to 18.8% for physical limitations. We imputed missing data on all independent variables, using multiple imputation by chained equations in STATA version 16.0 to maximize our analytic sample size (see Supplementary Table 1 [see online Supplementary material] for levels of item-specific missing data). We re-estimated all models without imputed data; our sample sizes were considerably smaller and ranged from 7,148 (pain symptoms) to 15,044 (overall quality of care assessment). Our results were similar to those from the imputed sample, such that divorced and widowed persons had poorer outcomes on several EOL dimensions relative to their married counterparts (all results available from authors). All multivariable analyses are adjusted for study analytic weights.

Measures

Dependent variables

We focus on key dimensions of a "good death" (IOM, 2015): overall quality of care, management of physical and emotional symptoms, patient-focused care, and receipt of dignified care. *Overall quality of care* is assessed with the item "Overall, how would you rate [decedent's] care in the last month? (excellent, very good, good, fair, or poor?)" Based on the distribution of responses, we recoded responses into three categories: excellent (51%), very good (31%), and good/fair/poor (18%). We consider three dimensions of *physical and emotional symptom management*. Proxies are asked whether the decedent experienced (a) pain, (b) difficulty breathing, and (c) anxiety/sadness in the last month of life; whether each symptom was managed by health care providers, and whether the help received was less than needed, more than needed, or about right. For each symptom, we constructed the categories of "no symptoms"; "yes, symptoms that are adequately managed (i.e., received the right amount of help)"; and "yes, symptoms that are not adequately managed."

Patient-focused care includes patient's and family members' informed involvement in care, assessing whether (a) "there was ever a decision made about [the decedent's] care or treatment without enough input" from them or their family and (b) "there was any decision about care or treatment that [they] would not have wanted." We also dichotomized responses to a third question assessing whether the patient or family was "kept informed about [the patient's] condition" (always vs usually, sometimes, or never), because 83% indicated "always." Last, we constructed a dichotomous measure of whether health care was well-coordinated. Respondents were asked whether during the last month of the decedent's life "there was more than one doctor involved in [their] care," and if yes, whether "it was always clear to you which doctor was in charge of [their] care." We constructed a dichotomous indicator of poorly coordinated care if there was more than one doctor, and it was not always clear who was in charge.

Dignified care was assessed with two questions: how often (a) were the patient's "personal care needs, such as bathing, dressing, and changing bedding, taken care of as well as they should have been"; and (b) the patient was "treated with respect by those who were taking care of [them]." Response options were always, usually, sometimes, never. We constructed dichotomous measures of always (83% and 89%, respectively) versus usually, sometimes, or never based on the skewed distribution of responses.

We conducted supplemental analyses using three composite measures: quality of care delivery ($\alpha = 0.78$), patient autonomy ($\alpha = 0.78$), and symptom management ($= 0.66$). These measures provide a less nuanced portrayal of end-of-life experiences. Thus, we focus here on the specific outcomes; results were consistent across models (Factor loadings and regression models for scales are presented in Supplementary Tables 2 and 3, respectively [see online Supplementary material]).

Independent variables

Focal predictors are *marital status* at time of death: married (reference group), remarried (i.e., in a second or higher-order marriage), divorced, widowed, and never married; and *gender* (male or female). Other social ties include *number of living siblings*, *number of living children*, and *number of persons*

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

(up to five) in one's social network with whom the respondent "can discuss important matters." We adjust for demographic, socioeconomic, and health correlates of both social relationships and end-of-life experiences (Carr & Luth, 2019; Karney, 2021). *Demographic* covariates include age (in years) and race/ethnicity (non-Hispanic White, non-Hispanic Black, and other). *Socioeconomic status* includes the highest level of education completed (less than high school, high school graduate, some college, and college graduate) and total individual income (log transformed).

Health covariates, based on self-reports at the last NHATS wave the respondent completed prior to death, include self-rated health (fair/poor vs good/very good/excellent); the presence of any of nine chronic conditions (arthritis, cancer, stroke, diabetes, osteoporosis, heart attack, heart disease, lung disease, and high blood pressure); and a Alzheimer's or related dementias (ADRD) diagnosis. Physical limitations refer to the total number of six mobility activities with which one had difficulty (e.g., walk three blocks by themselves without a cane). *Depressive symptoms* were assessed using the Patient Health Questionnaire 2-item. Scores refer to the total number of two possible symptoms experienced (little interest or little pleasure in doing things, and felt down, depressed, or hopeless) in the past month.

We adjust for the *proxy's gender and role relationship* to the decedent. We use broad categories of family (i.e., spouse, daughter, son, or other relative) or paid worker, to ensure that specific categories were not perfectly correlated with marital status. For instance, 0% of never married decedents yet 61% of married decedents had a spouse serve as proxy (see Supplementary Table 4 (see online Supplementary material) for cross-tabulation of marital status by fine-grained proxy relationship categories). Finally, we control for the year of the last month of interview, to capture potential historical variations in death quality during the 2011–2022 period.

Analytic plan

Descriptive statistics by gender are presented in Table 1. Bivariate analyses showing the ten end-of-life outcomes by marital status are presented in Table 2. We estimated multivariable multinomial (trichotomous outcomes) and binomial (dichotomous outcomes) logistic regression models to evaluate fully adjusted associations between social relationship statuses and study outcomes (Tables 3 and 4, respectively). We present results for models using currently married as the reference group, although we replicated all models using each of the other four marital statuses as the omitted category, to identify

Table 1. Descriptive statistics, all measures used in analysis by gender, NHATS, 2011–2022 ($N = 39{,}012$).

Variable	Total	Men	Women	Significant subgroup differences
Dependent variables				
Overall quality of EOL care				***
Poor/fair/good	18.08	19.44	17.21	
Very good	31.24	31.45	31.10	
Excellent	50.68	49.10	51.68	
Breathing problems				***
Unmanaged	9.47	11.59	8.09	
Managed	44.80	45.07	44.63	
No symptoms	45.73	43.34	47.29	
Pain				***
Unmanaged	13.73	13.65	13.78	
Managed	46.56	41.84	49.66	
No symptoms	39.72	44.52	36.55	
Sadness/anxiety problems				***
Unmanaged	23.72	26.49	21.87	
Managed	30.73	27.67	32.77	
No symptoms	45.55	45.84	45.36	
Care was well-coordinated	88.98	87.27	90.06	***
Care decisions made with sufficient patient input	92.71	91.89	93.23	***
Received care concordant with patient wishes	90.41	88.28	91.76	***
Kept informed about patient's condition	83.01	82.18	83.53	***
Personal care needs adequately met	83.16	81.09	83.16	***
Patient treated with respect	88.91	88.32	89.28	***
Independent variables				
Marital status				***
Married	29.82	49.13	15.62	
Remarried	2.84	4.97	1.28	
Divorced/separated	9.85	10.54	73.82	
Widowed	53.58	31.97	69.46	
Never married	3.91	3.40	4.29	
Social relationships				
Proportion childless	9.70	8.49	10.58	***
Number of children	3.12 (1.91)	3.12 (2.01)	2.97 (2.10)	***
Number of siblings	2.28 (2.96)	2.02 (2.63)	2.48 (3.18)	***
Social network size	2.12 (1.22)	1.99 (1.19)	2.22 (1.24)	***

(Continued)

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

Table 1. (Continued)

Variable	Total	Men	Women	Significant subgroup differences
Proxy relationship				***
Family	81.11	87.19	77.13	
Paid worker	18.89	12.81	22.87	
Proxy gender				***
Male	23.93	20.51	26.16	
Female	76.07	79.49	73.84	
Total income (log)	10.41 (1.04)	10.36 (1.00)	9.93 (1.03)	***
Educational attainment				***
Less than high school	32.48	33.74	31.36	
High school graduate	27.27	23.51	30.03	
Some college	22.99	19.58	25.48	
College degree	17.26	23.16	12.93	
Race/ethnicity				
Non-Hispanic White	71.98	70.61	72.86	
Non-Hispanic Black	20.86	20.53	21.06	
Other	7.17	8.86	6.08	
Self-rated health				n.s
Poor/fair	18.25	17.92	18.49	
Good or better	81.75	82.08	81.51	
Self-reported dementia/Alzheimer's	29.60	25.71	32.45	***
Has any chronic physical conditions	70.23	73.42	67.89	***
Number of physical limitations	1.64 (1.28)	1.52 (1.22)	1.73 (1.32)	***
Number of depressive symptoms	1.87 (0.90)	1.80 (0.87)	1.93 (0.91)	***

Note. Unweighted descriptive statistics. Proportions are presented for categorical measures, and means (standard deviations) are presented for continuous measures. Statistically significant gender differences are indicated.
*$p < .05$.
**$p < .01$.
***$p < .001$.

Table 2. End-of-life care measures by marital status, 2011–2022 NHATS ($N = 39{,}012$).

Variable	Married[a]	Remarried[b]	Divorced[c]	Widowed[d]	Never married[e]	Statistically significant contrasts
Overall quality of EOL care						
Poor/fair/good	20.72	18.92	27.78	18.42	22.55	ac, ad, bc, cd, de
Very good	29.34	40.54	35.32	31.48	33.33	ab, ac, ad, ae, bc, bd, be, cd
Excellent	49.94	40.54	36.90	50.10	44.12	ab, ac, ae, bd, cd, ce, de
Breathing problems						
Unmanaged	10.70	11.27	14.11	9.61	9.89	ac, cd, ce
Managed	44.39	49.30	41.91	44.64	42.86	bc, be
No symptoms	44.92	39.44	43.98	45.75	47.25	ab, bd, be
Pain						
Unmanaged	15.86	12.20	21.53	14.30	10.91	ac, ae, bc, cd, ce
Managed	41.01	41.46	40.97	43.94	41.82	ad
No symptoms	43.13	46.34	37.50	41.76	47.27	ac, bc, cd, de
Sadness/anxiety problems						
Unmanaged	27.18	37.50	29.86	25.08	13.19	ab, ad, ae, bc, be, cd, ce, de
Managed	29.15	18.75	29.41	31.09	25.27	ab, ad, bc, bd, be, de
No symptoms	43.66	43.75	40.72	43.83	61.54	ae, be, cd, ce, de
Care was well-coordinated	85.58	87.67	84.49	88.62	89.58	ad, ae, cd, ce
Care decisions made with sufficient patient input	90.41	91.55	90.57	93.38	89.69	ad, cd, de
Received care concordant with patient wishes	86.43	95.89	89.67	90.56	88.59	ab, ac, ad, bc, bd, be
Kept informed about patient's condition	82.62	81.08	78.97	81.33	82.00	ac, bd
Personal care needs adequately met	81.60	80.00	75.21	81.91	86.00	ac, ae, bc, be, cd, ce, de
Patient treated with respect	89.44	91.78	81.67	87.48	90.91	ac, ad, bc, bd, cd, ce, de
Proxy relationship						
Family	95.96	96.05	88.55	89.24	76.83	ac, ad, ae, bc, bd, be, ce, de
Paid worker	4.04	3.95	11.45	10.76	23.17	ac, ad, ae, bc, bd, be, ce, de
N	9,696	924	3,228	17,628	1,296	
%	29.6	2.8	9.9	53.8	69.7	

Note. ANOVAs were conducted to evaluate all statistically significant two-way contrasts. Statistically significant ($p < .05$) marital status contrasts are denoted as "ab" married vs remarried, etc.

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

Table 3. Summary of fully adjusted multinomial logistic regression models predicting end-of-life outcomes by marital status and gender, 2011–2022 NHATS.

	Overall quality of EOL care		Breathing problems		Pain		Sadness or anxiety	
	Very good	Excellent	Managed	No symptoms	Managed	No symptoms	Managed	No symptoms
Variable	(vs good/fair/poor)		(vs managed symptoms)		(vs unmanaged symptoms)		(vs unmanaged symptoms)	
Marital status								
Remarried	1.73	1.01	1.09	0.76	1.03	1.02	0.33**	0.61
	[0.81, 3.69]	[0.47, 2.14]	[0.39, 3.03]	[0.26, 2.22]	[0.37, 2.83]	[0.36, 2.87]	[0.15, 0.73]	[0.33, 1.14]
Separated/divorced	0.98	0.52**	0.74	0.59	0.63	0.52	1.03	0.84
	[0.63, 1.54]	[0.33, 0.82]	[0.42, 1.30]	[0.33, 1.05]	[0.34, 1.16]	[0.27, 1.01]	[0.64, 1.66]	[0.53, 1.32]
Widowed	1.47*	1.16	0.84	0.72	0.87	1.21	0.70*	0.74*
	[1.06, 2.05]	[0.85, 1.58]	[0.55, 1.28]	[0.48, 1.10]	[0.56, 1.34]	[0.78, 1.88]	[0.51, 0.96]	[0.55, 1.00]
Never married	1.36	0.76	0.77	0.55	1.22	1.58	1.11	1.33
	[0.65, 2.84]	[0.38, 1.53]	[0.31, 1.92]	[0.23, 1.30]	[0.43, 3.48]	[0.55, 4.56]	[0.50, 2.49]	[0.62, 2.87]
Number of children	1.00	0.99	0.99	0.93	1.03	0.98	1.01	0.98
	[0.93, 1.06]	[0.93, 1.06]	[0.92, 1.07]	[0.86, 1.00]	[0.94, 1.12]	[0.89, 1.07]	[0.95, 1.07]	[0.92, 1.04]
Number of siblings	1.03	1.03	0.99	0.97	1.06*	0.97	1.04	1.03
	[0.98, 1.09]	[0.98, 1.08]	[0.93, 1.06]	[0.91, 1.04]	[1.00, 1.13]	[0.91, 1.03]	[0.99, 1.09]	[0.98, 1.08]
Social network size	0.93	1.00	1.05	1.00	1.24**	1.28***	0.99	0.96
	[0.84, 1.03]	[0.91, 1.10]	[0.93, 1.19]	[0.89, 1.13]	[1.08, 1.42]	[1.11, 1.48]	[0.89, 1.09]	[0.88, 1.06]
Female	1.05	1.03	1.35	1.47*	0.80	0.57**	1.06	0.93
	[0.79, 1.40]	[0.78, 1.35]	[0.94, 1.94]	[1.02, 2.10]	[0.53, 1.21]	[0.38, 0.85]	[0.80, 1.42]	[0.71, 1.21]
Constant	0.02***	0.03***	0.01***	0.03**	0.22	6.15	0.03***	0.74
	[0.00, 0.13]	[0.00, 0.18]	[0.00, 0.10]	[0.00, 0.23]	[0.02, 3.15]	[0.40, 94.45]	[0.00, 0.18]	[0.13, 4.10]
Largest FMI	0.26		0.33		0.64		0.23	
Prob > *F*	0.00		0.00		0.00		0.00	
N	37,836		35,088		23,688		33,192	

Note. Relative risks (and confidence intervals) are presented. Sample sizes differ across outcomes due to item-specific missing data. All models adjusted for age, race/ethnicity, educational attainment, income (log), self-rated health, chronic conditions, depressive symptoms, dementia/Alzheimer's disease, proxy relationship, proxy gender, and survey wave. All models were adjusted for complex survey design. Statistically significant results indicated as follows:
*$p < .05$.
**$p < .01$.
***$p < .001$.

all significant contrasts (models available from authors). Finally, we tested two-way interaction terms to evaluate whether marital status differences in end-of-life outcomes differed by gender. Of the 24 two-way gender by marital status interactions evaluated for the six binary outcomes, only two were statistically significant ($p < .05$). Of the 32 two-way interactions tested for four trichotomous outcomes, none were statistically significant. The two significant (of 56 possible) interactions may be due to chance given multiple comparisons (Midway et al., 2020), so we do not present these results. We re-estimated the gender moderation analyses, combining the small remarried category (684 men and 240 women) with the large once-married category for enhanced statistical power, and similarly found no evidence of significant gender moderation.

Results

Bivariate analysis

Table 1 shows that NHATS decedents generally had high-quality deaths as reported by their proxies, although male decedents fared slightly worse along all ten outcomes, including receiving poorer overall quality of care (19.4% vs 17.2%), inadequately managed breathing (11.6% vs 8.1%), and mental health problems (26.5% vs 21.9%). Men also were slightly less likely to have well-coordinated care (87.3% vs 90.1%), decisions made with patient input (92% vs 93%), receipt of care concordant with their wishes (88.3% vs 91.8%), adequate information regarding their condition (82.2% vs 83.5%), personal care needs met (81.1% vs 83.2%), and respectful treatment (88% vs 89%).

Men and women differed with respect to marital status, consistent with prior studies. Men were more than three times as likely to have been in their first marriage (49% vs 15%) or remarried (4.9% vs 1.3%), whereas women were more than twice as likely to be widowed (70% vs 32%). Similar proportions of men and women were divorced (10.6% and 9.3%) or never married (3.5% and 4.3%). Accordingly, men were more likely to have a family member provide proxy reports at the end of life (87% vs 77%), versus a paid caregiver proxy (13% vs 23%). Men had slightly more living children (3.1 vs 2.97), whereas women had significantly more living siblings and network members (2.48 vs 2.02, and 2.22 vs 1.99, respectively). Supplementary analyses showed that never married persons had fewer network members and children than married, divorced, and widowed persons, whereas widowed persons had fewer living siblings. Men and women also differed with respect to their self-reported health conditions at the time of their final interview. Women had more depressive symptoms and physical limitations, and were more likely to have been diagnosed with ADRD.

Table 2 shows the results of ANOVA with post-hoc comparisons contrasting end-of-life care ratings by decedent marital status. Patterns differ slightly across outcomes, with once-married and widowed persons generally showing the highest

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

Table 4. Summary of fully adjusted binomial logistic regression models predicting end-of-life outcomes by marital status and gender, 2011–2022 NHATS.

Variable	Well-coordinated care	Decisions with patient input	Receipt of desired care	Patient kept informed	Personal care needs met	Respectful treatment
Marital status (ref = Married)						
Remarried	0.86	1.29	4.04*	0.92	0.91	1.36
	[0.38, 1.96]	[0.49, 3.38]	[1.17, 13.94]	[0.48, 1.77]	[0.45, 1.83]	[0.54, 3.38]
Separated/divorced	0.61	0.95	1.30	0.66	0.58*	0.47**
	[0.37, 1.01]	[0.54, 1.67]	[0.68, 2.48]	[0.43, 1.02]	[0.37, 0.90]	[0.29, 0.75]
Widowed	0.87	1.55*	1.16	0.74*	0.89	0.67*
	[0.60, 1.26]	[1.04, 2.29]	[0.77, 1.75]	[0.55, 0.99]	[0.65, 1.21]	[0.47, 0.96]
Never married	0.75	0.68	0.61	0.53	1.00	0.69
	[0.31, 1.82]	[0.28, 1.61]	[0.22, 1.69]	[0.27, 1.02]	[0.46, 2.16]	[0.29, 1.67]
Number of children	1.00	0.92	1.00	1.02	1.03	1.00
	[0.93, 1.08]	[0.85, 1.01]	[0.92, 1.09]	[0.96, 1.08]	[0.97, 1.09]	[0.94, 1.07]
Number of siblings	1.06*	0.99	0.97	1.00	0.98	0.99
	[1.00, 1.13]	[0.93, 1.05]	[0.88, 1.06]	[0.96, 1.05]	[0.93, 1.02]	[0.94, 1.05]
Social network size	1.00	1.08	1.03	1.00	1.00	0.93
	[0.89, 1.12]	[0.95, 1.24]	[0.91, 1.17]	[0.92, 1.10]	[0.90, 1.10]	[0.83, 1.03]
Female	1.20	0.97	1.17	1.08	1.26	1.24
	[0.87, 1.67]	[0.68, 1.40]	[0.82, 1.67]	[0.84, 1.40]	[0.97, 1.65]	[0.93, 1.67]
Constant	2.11	18.24**	0.94	0.35	0.72	0.38
	[0.20, 22.72]	[2.39, 139.02]	[0.10, 8.72]	[0.06, 2.08]	[0.11, 4.58]	[0.06, 2.60]
Largest FMI	0.18	0.14	0.11	0.23	0.23	0.27
Prob > *F*	0.00	0.00	0.04	0.00	0.00	0.00
N	35,928	36,720	27,792	37,500	35,064	37,548

Note. Odds ratios (and confidence intervals) are presented. Sample sizes differ across outcomes due to item-specific missing data. All models adjusted for age, race/ethnicity, educational attainment, income (log), self-rated health, chronic conditions, depressive symptoms, dementia/Alzheimer's disease, proxy relationship, proxy gender, and survey wave. All models were adjusted for complex survey design, and survey wave. Statistically significant results indicated as follows:
*$p < .05$.
**$p < .01$.
***$p < .001$.

quality experiences, with half receiving "excellent" overall care. Widow(er)s also were most likely to have care decisions made with their input (93%). Divorced persons fared consistently worst. They had the highest levels of poorly managed breathing problems and pain (14% and 21%, respectively), and the lowest levels of being informed about their care (79%), having personal care needs met (75%), and being treated with respect (82%).

Remarried persons varied across outcomes; they had the highest levels of inadequately managed sadness/anxiety symptoms (38%), yet also the highest levels of respectful treatment (92%) and care concordant with their wishes (96%). Never married persons also varied somewhat across outcomes, but generally fared as well as, if not better than, married persons. They evidenced particularly good outcomes regarding the absence of pain and mental health symptoms (47% and 61%), and having personal care needs met (86%).

Marital status categories also varied with respect to the role relationship between decedent and proxy. Nearly all once-married (95%) or remarried (96%) decedents had a familiy member provide proxy reports. Most divorced and widowed persons (88% and 89%, respectively), yet just 76% of never married decedents had a family member serve as proxy. The particular relative named varied across marital categories, such that 61% of once married and 46% of remarried persons named a spouse, yet most divorced (59%) and widowed (68%) persons named a child (Supplementary Table 4, see online Supplementary material). The proportion for whom another relative or paid professional served as proxy also differed by marital status; 57% of never married persons named another relative, whereas 23% named a paid worker. Just 12% and 15% of married and remarried persons, respectively, had a distant relative or paid worker serve as their proxy. About 4% of married persons had a paid care worker as their proxy, compared to 11% of divorced persons and 10% of widowed persons. About 28% of divorced and 20% of widowed persons had a distant relative provide proxy assessments of their end of life, respectively.

Multivariable analysis

Our multivariable analyses reveal the extent to which unadjusted marital status differences in end-of-life care persist after adjusting for all covariates. We present fully adjusted coefficients for marital status, other social ties, and gender; fully adjusted models with all covariates are presented in Supplementary Tables 5 and 6 (see online Supplementary material). Table 3 shows results for trichotomous outcomes of overall quality of end-of-life care, and the presence and management of breathing problems, pain, and sadness/anxiety symptoms. We detect only a few statistically significant marital status differences. Divorced decedents are less likely to have received excellent care overall (RRR = 0.52, $p < .01$), according to their proxies. Supplemental analyses using different reference categories showed that divorced persons also are significantly less likely than widowed persons to have had excellent overall care (RRR = 0.45, $p < .001$) and to have been free of pain (RRR = 0.43, $p < .01$) in the last month of life. Similarly, supplemental analyses using

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

composite outcomes show that divorced decedents have lower levels of overall care quality relative to married, remarried, and widowed decedents (Supplementary Table 3, see online Supplementary material).

Remarried decedents do not differ significantly from their once-married counterparts, with one exception; they are less likely to have had their mental health symptoms adequately managed (RRR = 0.33, $p < .01$). Widowed persons are more likely than married persons to havevery good overall care ratings at the end of life (RRR = 1.47, $p < .05$). Never married persons did not differ significantly from married decedents on any of the trichotomous outcomes.

These patterns did not differ by gender. However, women were more likely than men to be free of breathing problems (RRR = 1.47, $p < .05$), yet less likely to be free of pain (RRR = 0.57, $p < .01$), according to their proxies. Other social ties showed modest associations with the outcomes. Persons with a greater number of siblings (RRR = 1.06, $p < .05$) and social network members (RRR = 1.24, $p < .01$) were more likely to have their pain adequately managed, while a greater number of network members also was associated with being free of pain symptoms (RRR = 1.28, $p < .001$). However, number of children was not associated with the end-of-life outcomes. Supplemental analyses using a dichotomous indicator of childlessness similarly showed no significant effects.

Results for the dichotomous outcomes presented in Table 4 also reveal few significant differences, with divorced and widowed decedents generally showing poorer outcomes. Relative to decedents in their first marriage, divorced persons were less likely to have personal care needs met (OR = 0.58, $p < .05$), and to receive respectful care (OR = 0.47, $p < .01$). Supplemental analyses revealed that divorced persons also were less likely than remarried decedents (OR = 0.34, $p < .05$) to have been treated respectfully, and less likely than widowed decedents (OR = 0.65, $p < .05$) to have personal care needs met. Widowed decedents showed both disadvantages and advantages relative to their married counterparts. They were less likely to be informed about care (OR = 0.74, $p < .05$), and to have been treated with respect (OR = 0.67, $p < .05$), yet more likely to have medical decisions made with their input (OR = 1.55, $p < .05$). Remarried persons differed from their once-married counterparts on one dimension; they were nearly four times as likely to receive care concordant with their wishes (OR = 4.04, $p < .05$). Never married persons did not differ significantly from once-married persons. Supplemental analyses also revealed that widowed (OR = 0.29, $p < .05$) and never married (OR = 0.15, $p < .05$) persons were less likely than remarried persons to receive care concordant with their wishes. We found little evidence that other social ties affect end-of-life experiences; persons with a greater number of siblings were more likely to receive well-coordinated care (OR = 1.06, $p < .05$) according to their proxy reports, although we did not find significant effects for number of children or network members.

Discussion

Two co-occurring trends—prolongation of the dying process and rising numbers of older adults with limited social ties—have raised concerns about the quality of end-of-life care received by those who lack a knowledgeable family member, friend, or caregiver to support them (Carr & Luth, 2019; US Department of Health and Human Services, 2023). We examined how marital status and the presence of children, siblings, and other social ties shape ten dimensions of end-of-life experiences. Six key findings emerged, showing only modest support for marital control and compensatory theories and no support for gender-as-relational frameworks. First, divorced decedents generally had poor quality end-of-life outcomes. Second, widowed decedents' end-of-life experiences differed based on the domain of care considered. Third, never married persons did not differ from married persons at the end of life. Fourth, married and remarried decedents resembled each other closely, with each showing slightly different (dis)advantages at the end of life. Fifth, marital status patterns did not differ significantly by gender. Finally, other social ties had modest protective effects at the end of life, with these associations limited to sibling and social network ties. We discuss these findings and their implications for end-of-life health care practice.

Divorced persons vulnerable to poorer quality deaths

Divorced decedents were disadvantaged on nearly all outcomes in our bivariate analyses, and three of the ten outcomes relative to once-married decedents in our multivariable analyses: overall quality of care, personal care needs met, and treated respectfully. They also were less likely than widowed persons to have had excellent care, to be free of pain, and to have personal care needs met, and were less likely than remarried decedents to have been treated respectfully. These disadvantages likely reflect both social selection and causation processes. Divorce was rare in the NHATS cohort, so the 10% of sample members who divorced and did not subsequently remarry may have experienced adversities prior to or following divorce, including poorer health and socioeconomic disadvantages, that also rendered them vulnerable to poorer quality deaths (Sbarra & Whisman, 2022). Divorced persons may have poorer quality relationships with children and other family members, who may be less motivated, well-informed, or effective advocates and "decision partners" at the end of life (Sbarra & Whisman, 2022; Shapiro & Cooney, 2007). These strained relationships also may bias their proxies' assessments because negative emotion may lead to more critical recollections of the decedent's experiences (McPherson & Addington-Hall, 2003).

Divorced persons have lower rates of advanced care planning (ACP) and hospice use (Kalousová & Carr, 2024; Lackan et al., 2005), practices which are essential to a "good death." ACP is associated with superior end-of-life outcomes, including use of palliative care, and having one's care preferences honored (Bischoff et al., 2013), whereas hospice use reduces distress among family members (Wang & Meier, 2024). Divorced persons' lower rates of hospice use may reflect some hospice providers' requirement that enrolled patients have a co-residential caregiver to assist with home-based care (Aldridge et al., 2012). Efforts to encourage ACP among divorced persons and their families, and policy shifts in hospice enrollment practices may be effective paths to enhancing divorced older adults' quality of end-of-life care.

Widowed older adults have distinctive challenges and resources

Widowed persons reveal one advantage: they are more likely to have medical decisions made with their input. This advantage may reflect widow(er)s' experiences navigating their late

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

spouse's end-of-life care. They may be more knowledgeable and motivated to communicate their preferences to care providers, especially if their late spouse had a poor-quality death (Carr, 2012). Widowed older adults are more likely than married, divorced, and never married persons to have done ACP, a practice which helps convey one's treatment preferences (Kalousova & Carr, 2024). However, widowed persons also evidenced lower odds of respectful treatment, being informed about their care, and having their mental health symptoms adequately treated. Widowed persons are especially likely to have a daughter serve as their proxy (48% vs 18% among married persons); daughters may be highly sensitive to their dying parent's treatment and offer more critical appraisals of interpersonal dynamics between patient and provider (e.g., Solomon et al., 2018). Cognitive interviews with proxy reporters in end-of-life surveys may illuminate the processes through which they evaluate end-of-life care, and how their perceptions may differ based on their relationship to the decedent.

Never married persons similar to married persons at the end of life

Never married decedents had outcomes that were on par with their married counterparts. Our results challenge marital control frameworks and may reflect never married persons' adeptness at enlisting support and assistance to effectively manage end-of-life challenges. Never married persons cannot rely on a spouse, and few could rely on a child because non-marital parenthood was rare in the NHATS cohort. Consequently, they may engage family members, friends, or paid professionals who are best qualified to aid at the end of life. Notably, they were two and six times as likely as divorced and married decedents, respectively, to have a paid worker proxy. Paid caregivers' training and experience may enable them to effectively advocate for or arrange high-quality care at the end of life (Reckrey et al., 2024). Programs to increase access to knowledgeable paid helpers or enhance knowledge of family caregivers could foster high-quality end-of-life care (Rabow et al., 2004).

Remarried and once-married decedents have similar end-of-life experiences

We found few statistically significant differences between decedents in a first versus a higher-order marriage, which may reflect limited statistical power; just 3% of NHATS decedents (1% of women and 5% of men) were remarried. However, remarried decedents differed from once-married persons in one dimension: they were nearly four times as likely to receive care concordant with their wishes. Couples in a remarriage, who presumably married their current partner at an older age than their once-married counterparts, may feel a greater urgency to discuss aging-related issues as they anticipate their future. We encourage researchers to explore end-of-life experiences of remarried older adults, taking into consideration marital duration and quality, and the role of biological and stepchildren in end-of-life care. Although rising numbers of older adults are in a higher-order marriage, remarriage is still considered an "incomplete institution" with unclear role expectations for spouses and their adult children from current and prior relationships (Brown et al., 2019; Cherlin, 1978). Understanding their distinctive challenges may inform the kinds of supports they require at the end of life.

Gender-as-relational frameworks not supported

Our moderation analyses did not support gender-as-relational frameworks, suggesting that marital status disparities in end-of-life care do not differ on the basis of patient gender. These results diverge from studies showing that marriage provides greater health protection to husbands than wives, and that divorce, widowhood, and lifelong singlehood are more deleterious to older men than women (Carr & Utz, 2020). Likewise, we found few gender differences in our fully adjusted models, with women more likely to be free of breathing problems and men more likely to be free of mental health problems. Our findings align with research suggesting that with advancing age, gender gaps in behaviors and outcomes diminish (Glauber, 2017). Age-related health declines as one approaches death may necessitate reliance on trusted family members—regardless of one's gender (Kalousová & Carr, 2024; Leopold et al., 2018).

Siblings and network members offer modest protection at end of life

We found that number of living children was not significantly associated with the end-of-life outcomes. At first blush, these results are surprising, given theoretical writings (Fuller et al., 2020; Rook & Schuster, 1996) and empirical studies (Ornstein et al., 2017) emphasizing the importance of adult children as a source of support to older adults. However, end-of-life care may be a distinctive care context, such that children are a source of both support and conflict. Practitioners recognize the challenges presented by adult children who do not participate in an aged parent's daily care yet appear at their deathbed to challenge or derail treatment decisions (referred to as the "daughter from California" by Molloy et al., 1991). Future studies could further examine the positive and negative impacts of adult children on dying parents' end-of-life experiences.

Conversely, we found that decedents with a greater number of friends and siblings were more likely to die either free of pain or with their pain adequately treated. Siblings were also associated with greater odds of well-coordinated care. Siblings and social network members tend to be age-peers and may have the knowledge or experience required to advocate for appropriate palliation and coordinated care. Future research should explore more fully the distinctive roles that siblings and friends play in end-of-life care. Although these two role relations are fairly low on the "hierarchy" of older adults' care preferences (Rook & Schuster, 1996), they may occupy an outsized role at the end of life when spouses and children are either unavailable or emotionally unprepared to manage the challenges of their loved one's dying process.

Limitations and future directions

Our study has limitations that warrant attention in future research. First, we did not evaluate the mechanisms through which social ties affect end-of-life care. ACP and hospice use may be important mechanisms, given their benefits for end-of-life care and social patterning on the basis of marital status (IOM, 2015). Second, we focused on marital status only, yet did not capture other sources of heterogeneity such as marital quality or duration, and time elapsed since marital dissolution. Future studies using larger samples of decedents could explore sources of within-marital status heterogeneity in end-of-life outcomes.

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

Third, we did not evaluate the multiplicative impacts of spouse, child, sibling, and other network ties due to limited statistical power. Future research should explore how complex constellations of family and non-familial ties affect end-of-life care. Some research suggests that kinless persons (without living children or a spouse) do not differ from other adults with respect to end-of-life symptoms like pain, palliation, and treatment intensity, yet it is important to delineate how the specific relationships one possesses (or lacks) may shape health care interactions and experiences at the end of life (Plick et al., 2021).

Finally, we focused on proxies' *perceived* end-of-life assessments, rather than objective indicators like place of death based on Medicare beneficiaries' claims data. Proxy reports are considered reliable when evaluating observable conditions like breathing problems, yet are susceptible to bias for subjective assessments like sadness (McPherson & Addington-Hall, 2003). Proxy assessments may be susceptible to positive and negative recall biases, depending upon the proxy's relationship to the decedent and the death circumstances. Depressed or angry survivors may offer negatively biased assessments of their loved one's end-of-life care, whereas those who were integrally involved in caregiving may offer more positive appraisals to affirm their belief that they did all they could to help the decedent (Rao et al., 2009). Likewise, paid caregiver proxies may offer overly positive assessments to affirm their professional identities. They also may have less intense negative emotions following the death, such as grief, relative to family member proxies, and thus may offer less negatively biased assessments (McPherson & Addington-Hall, 2003).

Proxy knowledge also may differ based on their relationship to the decedent. We conducted supplemental analyses comparing the proportions responding "don't know" to the end-of-life assessments and found that paid worker proxies were more knowledgeable about aspects of care delivery, whereas family proxies were more knowledgeable about symptoms and patient engagement (Supplementary Table 7, see online Supplementary material). Despite these concerns, we believe proxy perceptions are an important outcome in their own right; the perception that a loved one or client had a problematic death could undermine the proxy reporter's emotional well-being or intensify feelings of grief. Health care systems should offer supports for bereaved survivors whose loved ones experienced particularly difficult deaths, recognizing that family members' freedom from "avoidable distress and suffering" also is a critical component of a "good death" (IOM, 2015).

In conclusion, our study has important implications for clinical practice, especially in enhancing end-of-life experiences for high and rising numbers of divorced older adults who may lack a knowledgeable advocate. Health care systems could provide greater access to nurse advocates and social workers at the end of life. Their tasks may include allaying concerns and answering questions, liaising between doctors and patients (and their families), providing emotional support to patients and families, and helping the patients to make informed decisions while nurses also assist with pain relief (Lasater et al., 2019). Physicians are often hurried, whereas nurses and social workers typically spend more time with patients, building close and trusting relationships, especially among patients with few other sources of support. Investments in training all health care professionals about end-of-life challenges, staffing sufficient numbers of nurse advocates or social workers in hospitals and long-term care settings, and actively engaging them as part of well-coordinated interprofessional care teams, may be effective paths toward enhancing the end-of-life care of those dying with limited family ties.

Supplementary material

Supplementary material is available at *The Journals of Gerontology Series B: Psychological and Social Sciences* online.

Data availability

The data and codes are available from K. Mahmoud. The National Health and Aging Trends (NHATS) data are publicly available and can be accessed at https://nhats.org/researcher/data-access. The study was not preregistered.

Funding

D. Carr was supported in part by the National Institute on Aging (1R56AG089170-01: The National Study of the Older Never-Married Adults [NSONMA]; PI: L. Song) and the Robert Wood Johnson Foundation (PIs: D. Carr and L. Kalousova). K. Mahmoud was supported by the Boston University College of Arts & Sciences.

Conflict of interest

None declared.

References

Ahmad, F. B., Cisewski, J., & Anderson, R. (2024). Mortality in the United States—Provisional data, 2023. *MMWR. Morbidity and Mortality Weekly Report*, *73*, 677–681. https://doi.org/10.15585/mmwr.mm7331a1

Aldridge, M. D., Barry, C. L., Cherlin, E. J., McCorkle, R., & Bradley, E. H. (2012). Hospices' enrollment policies may contribute to underuse of hospice care in the United States. *Health Affairs*, *31*, 2690–2698. https://doi.org/10.1377/hlthaff.2012.0286

Bischoff, K. E., Sudore, R., Miao, Y., Boscardin, W. J., & Smith, A. K. (2013). Advance care planning and the quality of end-of-life care in older adults. *Journal of the American Geriatrics Society*, *61*, 209–214. https://doi.org/10.1111/jgs.12105

Brown, S. L., & Lin, I. F. (2022). The graying of divorce: A half century of change. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *77*, 1710–1720. https://doi.org/10.1093/geronb/gbac057

Brown, S. L., Lin, I. F., Hammersmith, A. M., & Wright, M. R. (2019). Repartnering following gray divorce: The roles of resources and constraints for women and men. *Demography*, *56*, 503–523. https://doi.org/10.1007/s13524-018-0752-x

Carr, D. (2003). A "good death" for whom? Quality of spouse's death and psychological distress among older widowed persons. *Journal of Health and Social Behavior*, *44*,215–232. https://doi.org/10.2307/1519809

Carr, D. (2012). "I don't want to die like that …": The impact of significant others' death quality on advance care planning. *The Gerontologist*, *52*, 770–781. https://doi.org/10.1093/geront/gns051

Carr, D., & Luth, E. A. (2019). Well-being at the end of life. *Annual Review of Sociology*, *45*, 515–534. https://doi.org/10.1146/annurev-soc-073018-022524

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, *72*, 743–761. https://doi.org/10.1111/j.1741-3737.2010.00728.x

Carr, D., & Utz, R. L. (2020). Families in later life: A decade in review. *Journal of Marriage and Family*, *82*, 346–363. https://doi.org/10.1111/jomf.12609

Census Bureau. (2022). *Older population and aging data tables, 2021*. US Bureau of the Census. https://www.census.gov/topics/population/older-aging/data/tables.html

Cherlin, A. (1978). Remarriage as an incomplete institution. *American Journal of Sociology*, *84*, 634–650. https://doi.org/10.1086/226830

Cornwell, E. Y., & Waite, L. J. (2012). Social network resources and management of hypertension. *Journal of Health and Social Behavior*, *53*, 215–231. https://doi.org/10.1177/0022146512446832

DePaulo, B. (2023). Single and flourishing: Transcending the deficit narratives of single life. *Journal of Family Theory & Review*, *15*, 389–411. https://doi.org/10.1111/jftr.12525

Fuller, H. R., Ajrouch, K. J., & Antonucci, T. C. (2020). The convoy model and later-life family relationships. *Journal of Family Theory & Review*, *12*, 126–146. https://doi.org/10.1111/jftr.12376

Glauber, R. (2017). Gender differences in spousal care across the later life course. *Research on Aging*, *39*, 934–959. https://doi.org/10.1177/0164027516644503

Gray, T. F., Nolan, M. T., Clayman, M. L., & Wenzel, J. A. (2019). The decision partner in healthcare decision-making: A concept analysis. *International Journal of Nursing Studies*, *92*, 79–89. https://doi.org/10.1016/j.ijnurstu.2019.01.006

Institute of Medicine. (1997). *Approaching death: Improving Care at the End of Life* (M. J. Field & C. K. Cassel, Eds.). National Academies Press (US). https://doi.org/doi.org/10.17226/5801http://www.ncbi.nlm.nih.gov/books/NBK233605/

Institute of Medicine. (2015). *Dying in America: Improving quality and honoring individual preferences near the end of life*. National Academies Press. https://doi.org/10.17226/18748

Kalousová, L., & Carr, D. (2024). Marital status and advance care planning among older adults: Do gendered patterns vary by age? *The Journals of Gerontology: Series B, Psychological Sciences and Social Sciences*, *79*, gbae141. https://doi.org/10.1093/geronb/gbae141

Karney, B. R. (2021). Socioeconomic status and intimate relationships. *Annual Review of Psychology*, *72*, 391–414. https://doi.org/10.1146/annurev-psych-051920-013658

Kasper, J. D., & Freedman, V. A. (2020). *National health and aging trends study user guide: Rounds 1-b Beta release*. Johns Hopkins University School of Public Health.

Lackan, N. A., Ostir, G. V., Kuo, Y. F., & Freeman, J. L. (2005). The association of marital status and hospice use in the USA. *Palliative Medicine*, *19*, 160–162. https://doi.org/10.1191/0269216305pm981oa

Lasater, K. B., Sloane, D. M., McHugh, M. D., & Aiken, L. H. (2019). Quality of end-of-life care and its association with nurse practice environments in us hospitals. *Journal of the American Geriatrics Society*, *67*, 302–308. https://doi.org/10.1111/jgs.15671

Leopold, T., Skopek, J., & Schulz, T. C. D. (2018). Gender convergence in housework time: A life course and cohort perspective. *Sociological Science*, *5*, 281–303. https://doi.org/10.15195/v5.a13

Lin, I. F., & Brown, S. L. (2021). The economic consequences of gray divorce for women and men. *The Journals of Gerontology: Series B, Psychological Sciences and Social Sciences*, *76*, 2073–2085. https://doi.org/10.1093/geronb/gbaa157

Liu, H., Zhang, Z., Choi, S., & Langa, K. M. (2020). Marital status and dementia: Evidence from the Health and Retirement Study. *The Journals of Gerontology: Series B, Psychological Sciences and Social Sciences*, *75*, 1783–1795. https://doi.org/10.1093/geronb/gbz087

McPherson, C. J., & Addington-Hall, J. M. (2003). Judging the quality of care at the end of life: Can proxies provide reliable information? *Social Science & Medicine*, *56*, 95–109. https://doi.org/10.1016/S0277-9536(02)00011-4

Midway, S., Robertson, M., Flinn, S., & Kaller, M. (2020). Comparing multiple comparisons: Practical guidance for choosing the best multiple comparisons test. *PeerJ*, *8*, e10387. https://doi.org/10.7717/peerj.10387

Molloy, D. W., Clarnette, R. M., Braun, E. A., Eisemann, M. R., & Sneiderman, B. (1991). Decision making in the incompetent elderly: "The Daughter from California Syndrome." *Journal of the American Geriatrics Society*, *39*, 396–399. https://doi.org/10.1111/j.1532-5415.1991.tb02907.x

Ornstein, K. A., Kelley, A. S., Bollens-Lund, E., & Wolff, J. L. (2017). A national profile of end-of-life caregiving in the United States. *Health Affairs*, *36*, 1184–1192. https://doi.org/10.1377/hlthaff.2017.0134

Plick, N. P., Ankuda, C. K., Mair, C. A., Husain, M., & Ornstein, K. A. (2021). A national profile of kinlessness at the end of life among older adults: Findings from the Health and Retirement Study. *Journal of the American Geriatrics Society*, *69*, 2143–2151. https://doi.org/10.1111/jgs.17171

Rabow, M. W., Hauser, J. M., & Adams, J. (2004). Supporting family caregivers at the end of life: They don't know what they don't know. *JAMA*, *291*, 483–491. https://doi.org/10.1001/jama.291.4.483

Rao, J. K., Abraham, L. A., & Anderson, L. A. (2009). Novel approach, using end-of-life issues, for identifying items for public health surveillance. *Preventing Chronic Disease*, *6*, A57. https://pmc.ncbi.nlm.nih.gov/articles/PMC2687863/.

Reckrey, J. M., Watman, D., Perez, S., Franzosa, E., Ornstein, K. A., & Tsui, E. (2024). Paid caregiving in dementia care over time: Paid caregiver, family caregiver, and geriatrician perspectives. *The Gerontologist*, *64*, gnae055. https://doi.org/10.1093/geront/gnae055

Rendall, M. S., Weden, M. M., Favreault, M. M., & Waldron, H. (2011). The protective effect of marriage for survival: A review and update. *Demography*, *48*, 481–506. https://doi.org/10.1007/s13524-011-0032-5

Ridgeway, C. L. (2009). Framed before we know it: How gender shapes social relations. *Gender & Society*, *23*, 145–160. https://doi.org/10.1177/0891243208330313

Rook, K. S., & Schuster, T. L. (1996). Compensatory processes in the social networks of older adults. In *Handbook of social support and the family* (pp. 219–248). Springer.

Roth, A., & Peng, S. (2022). Non-spousal support, marital status, and mortality risk. *Journal of Aging and Health*, *34*, 41–50. https://doi.org/10.1177/08982643211025381

Sarkisian, N., & Gerstel, N. (2016). Does singlehood isolate or integrate? Examining the link between marital status and ties to kin, friends, and neighbors. *Journal of Social and Personal Relationships*, *33*, 361–384. https://doi.org/10.1177/0265407515597564

Sbarra, D. A., & Whisman, M. A. (2022). Divorce, health, and socioeconomic status: An agenda for psychological science. *Current Opinion in Psychology*, *43*, 75–78. https://doi.org/10.1016/j.copsyc.2021.06.007

Shapiro, A., & Cooney, T. M. (2007). Divorce and intergenerational relations across the life course. *Advances in Life Course Research*, *12*, 191–219. https://doi.org/10.1016/S1040-2608(07)12007-4

Silverman, P. R. (2004). *Widow to widow: How the bereaved help one another* (2nd ed.). Routledge. https://doi.org/10.4324/9780203020975

Solomon, D. N., Hansen, L., & Baggs, J. G. (2018). It's all about the relationship: Cognitively intact mother–daughter care dyads in hospice at home. *The Gerontologist*, *58*, 625–634. https://doi.org/10.1093/geront/gnw263

Springer, K. W., Mager Stellman, J., & Jordan-Young, R. M. (2012). Beyond a catalogue of differences: A theoretical frame and good practice guidelines for researching sex/gender in human health. *Social Science & Medicine*, *74*, 1817–1824. https://doi.org/10.1016/j.socscimed.2011.05.033

Umberson, D., Donnelly, R., & Pollitt, A. M. (2018). Marriage, social control, and health behavior: A dyadic analysis of same-sex and

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026

different-sex couples. *Journal of Health and Social Behavior*, *59*, 429–446. https://doi.org/10.1177/0022146518790560

US Department of Health and Human Services. (2023). *Our epidemic of loneliness and social isolation. The US Surgeon General's advisory on the healing effects of social connection and community*. https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf

Waldron, I., Hughes, M. E., & Brooks, T. L. (1996). Marriage protection and marriage selection—Prospective evidence for reciprocal effects of marital status and health. *Social Science & Medicine*, *43*, 113–123. https://doi.org/10.1016/0277-9536(95)00347-9

Wang, K., & Meier, D. (2024). Palliative care. In *Geriatric medicine: A person-centered evidence based approach* (pp. 1401–1410). Springer International Publishing. https://doi.org/10.1007/978-3-030-74720-6_22

Downloaded from https://academic.oup.com/psychsocgerontology/article/80/9/gbaf135/8213601 by GSA Society Access user on 02 April 2026