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Bereavement in later life

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Death is one of life's few certainties, so bereavement—or the loss of a family member, friend, or acquaintance—is an inevitable and near universal experience. Although death can occur at any age, it is particularly common in later life. Of the 2.8 million deaths in the United States in 2017, nearly three-quarters befell persons ages 65 and older (Kochanek, Murphy, Xu, & Arias, 2019). Consequently, bereavement is especially common among older adults, as they adjust to the deaths of their contemporaries including spouse, siblings, and friends, as well as the deaths of generations above (parents) and, less frequently, generations below (children and grandchildren).

Late-life death in the 21st century tends to be a prolonged process rather than a sudden event; nearly two-thirds of deaths to older (age 65+) and midlife (ages 45–64) adults are attributed to chronic illnesses such as heart disease, cancer, stroke, liver disease, and dementia (Kramarow & Tejada-Vera, 2019). Advances in medical technologies including chemotherapy, feeding tubes, and ventilators, have extended the time that older adults can survive with major illness, so the "living—dying interval" between onset of major illness

and death may last for weeks, months, or even years (Pattison, 1977). This protracted period may be accompanied by chronic stressors for the dying person's loved ones, such as arduous caregiving, managing complex medication regimens, and witnessing pain and suffering, as well as uplifting moments of meaningful communication, closeness, and thoughtful preparation for the impending death (Carr & Luth, 2019). These experiences bear powerfully on bereaved older adults.

Bereavement is conceptualized as a stressor that requires readjustment to one's life without the deceased loved one present. Stress related to the loss may undermine physical health and multiple aspects of mental health, including symptoms of anxiety, depression, grief, and loneliness (Stroebe, Hansson, Schut, & Stroebe, 2008). Yet late-life bereavement is not a monolithic experience and its impacts vary widely based on characteristics of the survivor, decedent, late relationship, and context of the loss. Emerging research also documents remarkable resilience following loss, with bereaved older adults investing in new relationships, pursuing activities, acquiring skills and competencies, finding meaning in the loss, and enjoying psychological

growth in the aftermath (Recksiedler, Loter, Klaas, Hollstein, & Perrig-Chiello, 2018). Contemporary studies, often drawing on family-level or dyadic data, also reveal that the personal consequences of loss can reverberate through the family system, such that parent—child ties evolve following the loss of a spouse, and sibling relationships may change when a parent dies (Walsh & McGoldrick, 2004).

In this chapter, we summarize theoretical perspectives that have guided classic and contemporary research on the personal consequences of loss in later life. We then describe the patterning and psychosocial consequences of common types of late-life losses. We focus primarily on widowhood, which accounts for the overwhelming share of contemporary research on latelife bereavement. We also describe how older adults adapt to the losses of other meaningful relationships including child(ren), parents, siblings, friends, and an emerging area of research, animal companions. We conclude by suggesting avenues for future research: late-life adaptations to deaths from overdose and violence, and the bereavement experiences of those growing old under conditions of extreme adversity. We suggest policies and practices that may facilitate adaptation to late-life loss.

Theoretical perspectives

Contemporary bereavement research demonstrates that not all losses are equal. Although Holmes and Rahe's (1967) pioneering study ranked the deaths of a spouse and close family members as among the most stressful experiences of adulthood—with friend deaths lagging slightly behind—empirical research shows that whether, for how long, for which outcomes, and how intensely one suffers in the face of loss varies widely. Three conceptual frameworks are commonly used for understanding the complex linkages between late-life loss and adaptation: attachment (Bowlby, 1980), stress and coping (Pearlin, Schieman, Fazio, & Meersman, 2005), and dual process (Stroebe & Schut, 2016) models.

Attachment theories

Attachment theories propose that when a close emotional bond is severed—whether through death or separation—the grief process ensues (Bowlby, 1980). The grief process typically encompasses feelings of sorrow or sadness and anxiety, as well as yearning for the deceased (Parkes, 1985). Attachment perspectives have two important implications for understanding late-life

bereavement. First, the dissolution of emotionally and socially significant ties elicit more profound reactions than the loss of more tenuous or conflictual ties. Second, bereaved persons have diverse reactions to loss, including depression, anxiety (or "active distress"), or yearning for the deceased and a desire to reestablish bonds with them. As we show later in this chapter, reactions to loss are powerfully shaped by the level of closeness (or conflict) in one's ties to the decedent (Carr et al., 2000), with distinctive symptoms emerging for different types of loss, such as intrusive thoughts or symptoms of posttraumatic stress disorder (PTSD) in the face of traumatic and sudden deaths (Kaltman & Bonanno, 2003), or anticipatory grief in the months leading up to the death of a terminally ill significant other, especially those with dementia (Holley & Mast, 2009).

Stress and coping models

Stress and coping frameworks propose that the extent to which an acute event (e.g., the death of a loved one) or chronic strains (e.g., providing care to a dying family member) affects well-being depends on the context in which the stressor occurs (Pearlin et al., 2005). While early writings typically focused on one stressor at a time, such as a family death or job loss, contemporary research and theory underscores that a single stressor can precede, occur alongside, or emanate from other stressors, amplifying its physical and emotional consequences. A discrete life event may give rise to new and multiple chronic strains; for example, the sudden death of a spouse may trigger financial strains if that spouse had been the family's primary breadwinner (Umberson, 1992). Likewise, chronic strains may precede a stressful life event; for example, an adult child's struggle with drug addiction may trigger their untimely and sudden death (Feigelman, Feigelman, & Range, 2018).

The personal impact of a stressor also depends on one's coping resources and strategies. Coping resources are the personal and contextual attributes individuals draw upon when dealing with a challenge (Pearlin et al., 2005). Social support is widely considered the most important resource, as it encompasses the instrumental, emotional, and informational assistance that may help bereaved older adults adjust to the realities of loss. Coping strategies, alternatively, are the behaviors, cognitive processes, or emotional responses one uses in stressful contexts (Lazarus & Folkman, 1984). The two main types of strategies are problem-focused coping, where one tries to alter the situation that is causing the stress, and emotion-focused coping, where one alters their reactions to and feelings

regarding the stressor, such as finding the humor in or denying the situation (Carver, Scheier, & Weintraub, 1989). While problem-focused tactics are generally considered most effective in warding off distress, emotion-focused coping may be particularly effective when the context cannot be altered, as in the case of an irreversible loss, or when age-related physical or cognitive challenges make it difficult if not impossible for a person to alter the situation (Carr, 2020).

Stress and coping models have been particularly instructive in pinpointing risk and protective factors, revealing the importance of coping resources like the widow(er)'s psychological resilience (King, Carr, & Taylor, 2018), and social ties (Ellwardt, Wittek, Hawkley, & Cacioppo, 2019), as well as the behavioral and cognitive strategies one uses to adapt to the loss, such as turning to religion (Brown, Nesse, House, & Utz, 2004; Carr, 2020). Stress process frameworks also recognize the importance of social inequalities, such that persons with fewer economic resources and less social power are vulnerable to a greater number of stressors, and typically have fewer material resources that could facilitate effective coping (Pearlin et al., 2005). For this reason, stress and coping perspectives cast a distinctly sociological lens on bereavement, an outcome that historically has been explored as an individual-level psychological reaction to loss (Stroebe et al., 2008). Attention to the social patterning of stress and coping enables explorations of the ways that bereavement experiences are shaped by one's race, class, gender, and sexual orientation.

Dual process model

Research on bereavement has focused historically on psychological reactions, yet more recent work extends beyond emotional symptoms. The most influential framework for understanding behavioral adaptations to loss is the dual process model (DPM), which places equal emphasis on emotional and practical even mundane—daily life challenges that follow from bereavement, such as learning new household management skills and establishing new relationships (Stroebe & Schut, 2016). In order to cope effectively, bereaved persons must "oscillate" between lossoriented (LO) coping and restoration-oriented (RO) coping. The former refers to coping processes that focus directly on the stress of the loss, including symptoms of grief, loss and sadness; the latter includes the processes one uses to cope with the secondary stressors that accompany one's new status as a bereaved person such as managing the housework or financial tasks previously carried out by one's late spouse (Utz, Reidy, Carr, Nesse, & Wortman, 2004). Oscillation is

essential for optimal adjustment; bereaved persons must attend to practical as well as emotional matters, and may turn to RO activities as respite from negative emotions associated with the lost attachment. For instance, bereaved older spouses who learn new skills report the highest levels of personal growth and increases in mastery and self-esteem (Carr, 2004a). The DPM framework has motivated researchers to cast a wide lens, exploring how bereaved persons might rearrange their daily lives and engage in new activities, pursuits, and relationships following the loss of a loved one.

Late-life bereavement: patterns and consequences

Older adults experience multiple losses, including the deaths of a spouse or romantic partner, adult children, parents, siblings, friends and acquaintances, and even the animal companions that are a particular source of support for socially isolated adults. We describe the social patterning of these losses, and their implications for older adults' emotional well-being, highlighting the contextual and personal factors that moderate these impacts.

Spouse and partner bereavement

Widowhood, or the loss of a spouse/romantic partner, is the most commonly studied type of late-life bereavement, reflecting the primacy of marriage and romantic partnerships in the daily lives of older adults (Carr & Moorman, 2011). Widowhood is a more common and anticipated transition for wives than husbands in different-sex marriages, given men's lower life expectancy and tendency to marry women slightly younger than themselves. In 2016 12% of men and 34% of women ages 65+ were widowed, yet this gap widens even further with advanced age. Among persons ages 85 and older, 35% of men and 72% of women are widowed (Roberts, Ogunwole, Blakeslee, & Rabe, 2018). Women also are more likely to remain widowed, whereas men are more likely to remarry or enter a cohabiting union after their spouse dies, reflecting the imbalanced sex ratio among older adults (Brown, Lin, Hammersmith, & Wright, 2019).

Older widow(er)s vary widely in their emotional reactions to loss. Estimates vary across samples, but studies generally concur that 20%–40% of older bereaved spouses report symptoms of depression, anxiety, or grief during the first 6 months following loss before returning to preloss levels of mental health. An estimated 50% of older bereaved spouses are resilient,

exhibiting few or no signs of prolonged distress (Bonanno et al., 2002). Severe reactions are rare, yet as many as 15% of bereaved spouses experience complicated or chronic grief; this encompasses symptoms like extreme longing for the deceased, intense emotional pain, anger, and disengagement from activities or relationships for at least 12 months following the loss (Prigerson, Vanderwerker, & Maciejewski, 2008; Shear et al., 2011). Myriad influences, including biological, psychosocial, and economic factors affect late-life spousal bereavement. We focus on five core influences: sociodemographic factors, the nature of the late marital relationship, the context of the death, social support and integration, and other cooccurring losses and stressors.

Sociodemographic influences on partner bereavement

The consequences of late-life partner bereavement vary based on one's social location, including one's age, gender, sexual orientation, and race/ethnicity. Although researchers have investigated extensively the ways that age and gender shape spousal bereavement, comparisons across other subgroups of older adults are rare. Most studies of bereavement rely on large sample surveys, in which spousal death is a relatively rare event, and in which relatively low proportions of older adults identify as a sexual or racial minority. For example, in 2010 only 9% and 7% of persons aged 65+ older identified as black or Latino, respectively Aging-Related (Federal Interagency Forum on Statistics, 2016), while only 2% identify as gay, lesbian, or bisexual (Gates & Newport, 2012). Demographic characteristics matter because they shape the timing and nature of the loss, as well as the resources available to cope with the widowhood transition.

Age

The death of a spouse has distinctive consequences for older versus younger adults. Older adults have risk factors that render them particularly vulnerable to the emotional and physical consequences of spousal loss, including declining physical health and the cooccurrence of other age-related stressors, as we discuss later in the chapter. Yet they also possess skills, experiences, social resources, and even cognitive capacities that facilitate adaptation. Older adults are more likely than younger persons to have experienced the deaths of significant others prior to spousal loss, and they may be better equipped to make sense of and cope with their most recent loss (Thompson, Gallagher-Thompson, Futterman, Gilewski, & Peterson, 1991). Because spousal death is a common later-life stressor, older adults (especially women) may anticipate and prepare for the deaths of their husbands as they observe their peers

experiencing spousal loss (Silverman, 2004). They also may turn to their widowed peers for emotional support and advice. By contrast, deaths to younger adults are more likely to occur suddenly and under very distressing circumstances, such as murders, accidents, suicide, or accidental overdose (Kochanek et al., 2019). Given that predictable, anticipated life transitions are less stressful than unexpected ones (George, 1993), older bereaved spouses may experience a less difficult readjustment than their younger counterparts.

Life span psychologists also suggest developmental reasons why older adults tend to have fewer and less intense symptoms of distress in the face of loss relative to their younger counterparts. Older adults have reduced emotional reactivity, or a greater capacity to manage and regulate their emotional states (Charles & Carstensen, 2007). As a result, their grief reactions also are less intense and shorter lived, compared with younger bereaved persons (Nolen-Hoeksema & Ahrens, 2002). Emotional reactivity declines in old age due to several factors: biological decreases in autonomic arousal, the greater habituation of older adults to emotional life events, adherence to cultural expectations that older adults should not be "too emotional," and shifts in the relative salience of emotion versus cognition in late life (Charles & Carstensen, 2007). Older adults also are believed to possess wisdom, which may help them respond to adverse life events with equanimity and acceptance (Ardelt & Jeste, 2016).

Older widow(er)s also may be better prepared to manage the practical tasks that were once managed by their late spouse, a key component of RO coping (Stroebe & Schut, 2016). The boundaries demarcating traditional men's roles and women's roles in different-sex marriages become blurred as husbands and wives age, retire, and face health declines. Although older married couples abide by a gendertyped division of household labor just as younger couples do, this division changes upon retirement as spouses take on more gender-equitable roles in the home (Leopold & Skopek, 2015). Household roles also shift and converge as older adults experience health declines and limitations to daily functioning. Physical health problems may render older adults less able to perform the homemaking or home maintenance tasks they did earlier in life. For instance, if a wife's physical limitations prevent her from preparing meals, her husband may take over those duties. Likewise, a husband's cognitive decline may result in a wife's increased involvement in estate planning and financial decisions that previously were managed by the husband. Older adults may gradually take on their ailing spouses' tasks prior to widowhood, and thus they may be better prepared for the death (Carr, 2004a; Roberto, McCann, & Blieszner, 2013).

Gender

The well-documented effects of spouse or partner loss on older adults' emotional (including depressive symptoms, loneliness, and anxiety) and physical (including mortality risk, disability, and functional limitations) well-being are generally larger for men than women (Lee & DeMaris, 2007), although one recent study suggests that with the passage of time, longterm widowed men and women do not differ significantly with respect to depressive symptoms (Sasson & Umberson, 2014). Widowers consistently fare worse than widows regarding physical health, especially mortality (Moon, Kondo, Glymour, & Subramanian, 2011). While romantic lore suggests that emotionally devastated widowers may die of a broken heart shortly after their wives die, research shows the loss of a helpmate and caretaker is a more plausible explanation. Wives monitor their husbands' diets, remind them to take daily medications, and urge them to give up vices like smoking and drinking (August & Sorkin, 2010). Widowers are more likely than married men to die of accidents, alcohol-related deaths, lung cancer, and chronic ischemic heart disease during the first 6 months after their loss, but not from causes less closely linked to health behaviors (Martikainen & Valkonen, 1996; Moon et al., 2011).

Widows, by contrast, are particularly vulnerable to declines in their economic well-being, which may trigger anxiety and distress (Umberson, 1992). Widows experience substantial declines in income from all sources, ranging from earned income to pensions to Social Security (Gillen & Kim, 2009). Costs associated with burial, funeral, long-term and medical care, or estate-related legal proceedings can devastate the fixed income of older widows. Because current cohorts of older women typically tended to child-rearing and family responsibilities, they have fewer years of paid work experience and lower earnings than their male peers, on average. Older women also are more likely than older men to exit the labor force to provide care for their spouse, making it more difficult to return to the labor market given the loss of skills during their time out of the labor force (Gonzales, Lee, & Brown, 2017). Older widows who try to reenter the labor force also may face age discrimination, which in turn may compromise their emotional and financial well-being (Duncan & Loretto, 2004).

Sexual orientation

Relatively little is known about experiences of partner loss for current cohorts of older adults who had same-sex unions. For older men and women today, the legalization of same-sex marriage came about very late in their lives. On June 26, 2015, the US Supreme Court

legalized same-sex marriage in all 50 states, a policy shift that may ultimately equalize many aspects of bereavement for older adults. Yet prior to that time, same-sex couples did not enjoy the same legal rights extended to different-sex married couples, including the opportunity to make healthcare and end-of-life decisions for ill partners. Bereaved same-sex partners also may receive insufficient emotional support upon loss because their relationship was not recognized or acknowledged in the wider community. Gay and lesbian partners also report conflicts with their deceased partner's family, particularly with respect to the dispersion of personal possessions (Green & Grant, 2008). For current cohorts of older adults who were particularly vulnerable to "minority stress" including institutional and interpersonal discrimination due to their sexual orientation, these secondary strains could intensify their symptoms of distress (Meyer, 2003).

Yet mounting research suggests that older gay men and lesbians possess distinctive advantages as they cope with loss (Donnelly, Reczek, & Umberson, 2018). They often have created their own support networks of friends and selected family members. They also may be more likely than their heterosexual peers to enact flexible gender roles. Because they are not bound to traditional gender-typed family roles, they may be better prepared to manage the daily challenges and responsibilities faced by the newly bereaved (Almack, Seymour, & Bellamy, 2010). Same-sex couples also have a more balanced approach to caregiving, in which partners are equally likely to provide direct care to one another-in sharp contrast to different-sex couples in which wives often bear the brunt for caring for their husbands. Consequently, same-sex spouses experience less caregiving strain, and are less emotionally and physically compromised when they make the transition from spousal caregiver to bereaved spouse (Umberson, Thomeer, Kroeger, Reczek, & Donnelly, 2016). Qualitative research also shows that same-sex couples are more likely than opposite-sex spouses to do end-of-life planning and to talk about how they might cope with bereavement (Thomeer, Donnelly, Reczek, & Umberson, 2017). As such, same-sex spouses may be better prepared for and less vulnerable to RO stressors related to the loss.

Race

Research on racial differences in late-life spousal bereavement is sparse. This omission reflects the fact that few sample surveys include adequate numbers of older blacks, given their elevated risk of premature death (Federal Interagency Forum on Aging-Related Statistics, 2016; Umberson et al., 2017). Studies of recently widowed older blacks are even more difficult, given that blacks are less likely than whites to marry

and to remain married until old age (Raley, Sweeney, & Wondra, 2015). As such, we know very little about similarities and differences in how blacks and whites adjust to widow(er)hood. One prospective study of late-life spousal loss found that blacks and whites did not differ significantly with respect to depressive symptoms or yearning for their late spouse, although blacks had fewer symptoms of anger and despair (Carr, 2004b). Blacks' lower levels of anger were explained by two important coping resources: their higher levels of religiosity, and greater reliance on their children for social and instrumental support relative to whites. By contrast, blacks' lower levels of despair were attributed to the fact that their late marriages were marked by higher levels of conflict relative to whites. These findings are consistent with attachment theory, where losses are most distressing when the late relationship was marked by closeness and warmth, rather than strain and conflict.

Nature of the marriage or romantic relationship

Experiences of spousal bereavement depend on the nature of the lost relationship. Early theoretical writings suggested two distinct and competing hypotheses regarding the link between relationship quality and bereavement. Psychoanalytic models suggested that bereaved persons with the most troubled marriages would experience intense and prolonged grief (Parkes, 1985). This perspective held that persons who had conflicted marriages would find it hard to let go of their spouses, yet also feel angry at the deceased for abandoning them. However, empirical studies have found little support for this hypothesis, instead confirming the core theme of attachment theories: that the most close-knit relationships are mourned most strongly (Bowlby, 1980). Longitudinal studies that track married persons over time through the widowhood transition have been especially effective in documenting the ways that marital quality affects adjustment to loss. For instance, one analysis found that older persons whose marriages were marked by high levels of warmth and dependence, and low levels of conflict, experience elevated grief symptoms within the first 6 months postloss (Bonanno et al., 2002; Carr et al., 2000). Because these studies obtained marital quality reports prior to loss, they were not biased by "husband sanctification," or the tendency of recently bereaved women to idealize their late spouse and late relationship (Lopata, 1981).

Although those with high-quality marriages may suffer a greater sense of sadness within the initial months of loss, their strong emotional ties to the late spouse may prove protective in the longer term. Recent research suggests that those in high-quality marriages may draw strength from continuing bonds

with their late spouse. Early work on grief suggested that bereaved persons needed to dissolve or relinquish their emotional ties to the deceased and get on with their lives (e.g., Freud, 1917/1957), yet current research on "continuing bonds" suggests that maintaining an emotional tie to the deceased is an integral part of adaptation. Although some aspects of continuing bonds may be problematic for adjustment in the early stages of loss (e.g., not engaging with new relationships and activities), maintaining ties can be helpful and uplifting, especially as time elapses since the loss (Field, 2008). Widow(er)s may think about what their late spouse might do when faced with a difficult decision, or may keep alive their spouse's legacy by recognizing their continuing positive influence on one's current life. The warmth and closeness of the relationship may continue to be protective and affirming, even postloss.

Nature of the death

When, where, and under what conditions an older adult dies shape bereavement experiences of their surviving spouse. Anticipated deaths tend to be less distressing than sudden unanticipated ones; one prospective study found that spouses who experienced sudden bereavement had elevated symptoms of depression 6 months after the death (Burton, Haley, & Small, 2006). The knowledge that one's partner is going to die in the imminent future provides the couple time to address unresolved emotional, financial, and practical issues before the actual death. This preparation for death enables a smoother transition to widowhood. Conversations about end-of-life also are linked with less aggressive end-of-life care which, as we later discuss, reduces bereaved persons distress symptoms (Wright et al., 2008). However, for older persons, anticipated deaths often are accompanied by a spouse's long-term illness, pain and suffering, intensive caregiving, and neglect of one's own health concerns, thus taking a toll on one's health (Carr, House, Wortman, Nesse, & Kessler, 2001) and leaving one socially isolated (Burton, Haley, & Small, 2006).

Contrary to common wisdom, there is no clear-cut evidence that bereaved caregivers experience more intense grief than those who did not provide care. Caregivers may even experience improved psychological health following the loss of their spouse, because they are relieved of their stressful caregiving duties, they are no longer witnessing their loved one suffer, or they experience a sense of satisfaction, meaning, and accomplishment from caring for their loved one in his or her final days (Schulz, Boerner, & Hebert, 2008). However, family caregivers—who currently number more than 50 million in the United States alone—may require assistance prior to the death of

their spouse. The threat of impending death, strain of caregiving work, and the loss of personal time and activities may be distressing in the days and weeks leading up to the death.

The quality of medical care received at the end of life and place of death also affect the widow(er)'s experience. Older adults who believe that their spouse was in pain or received problematic medical care at the end of life report greater anxiety and anger postloss than persons whose loved one had a "good death" (Carr, 2003). Use of hospice or palliative care services is associated with better spousal bereavement outcomes including reduced mortality risk (Christakis & Iwashyna, 2003) and fewer depressive symptoms (Ornstein et al., 2015). Site of end-of-life care also matters. Teno et al. (2004) found that family members of recent decedents who received at-home hospice services were more likely than those who died at hospitals or nursing homes to say that their spouse received high-quality care, that they were treated with respect and dignity at the end of life, and that they and the patient received adequate emotional support.

Social support and integration

Stress and coping perspectives underscore the importance of social support as an essential resource for adapting to spousal loss. Close relationships with other family and friends are a source of practical and emotional support for widow(er)s. One widely cited explanation for widows' relatively lower levels of distress is that women maintain closer relationships over the life course than their male counterparts (Carr & Moorman, 2011). Older widows receive more practical and emotional support from their children than do widowers. Women also have larger and more varied friendship networks than men, and these friendships are an important source of support as women cope with spousal loss (Ha, 2008). Men, by contrast, often seek social support in new romantic relationships, whether dating or remarriage (Carr, 2004a; Brown et al., 2019).

For both widows and widowers, social isolation can impede adjustment to loss. Social isolation often is due to structural factors. Older adults living independently may lack transportation, have physical limitations that impair their mobility, and may be cut off physically from loved ones following a relocation to a new home or an assisted living facility. Even those who live close to their family may feel lonely because of family conflict, or because their family does not offer support of the type or amount that the widow(er) would like (Cacioppo & Cacioppo, 2014). The deaths of siblings and friends, two important later-life stressors we discuss below, also may leave older bereaved spouses

feeling isolated, as they have no one with whom to reminisce or share their feelings.

Other stressors

Stress theories recognize that the psychological consequences of a single stressor may be amplified when experienced in conjunction with other losses or strains. For older adults, the death of a spouse is almost always accompanied by other age-related strains and losses that may undermine their well-being, including financial strains, the loss of work and community roles including retirement and relocation, compromised mobility, health declines, diminishing vision and hearing, and even the loss of daily routines that gave one's life order and meaning. Widowhood often sets off a chain of secondary stressors which further compromise one's well-being, especially if older adults feel overloaded to the point that they cannot cope with either the emotional or practical demands of loss (Stroebe & Schut, 2016). For widowers, the loss of a confidante, helpmate, and caregiver may be particularly harmful, whereas for widows, financial difficulties often are a source of distress. These secondary stressors are linked with worry; frequent worrying, in turn, increases symptoms of sadness, grief, and anxiety, revealing the powerful ways that stress accumulation undermine older adults' well-being (Eisma, Boelen, Schut, & Stroebe, 2017).

Child death

The death of a child is a devastating event, especially for older women, given their high level of engagement with their children over the life course relative to men (Bratt, Stenström, & Rennemark, 2017). The death of a child, even an adult child in their 40s, 50s, or older, shatters one's expectations that children should outlive their parents, and that parents should protect their children from harm and suffering (Wheeler, 2001). Child death violates cultural beliefs regarding the "natural order" of the life course, yet it affects a sizeable minority of US adults. A recent analysis of data from the Health and Retirement Study (HRS) found that 12% of persons aged 51+ had ever lost a child, with a significantly higher proportion among blacks than whites (17% vs 10%) due in part to blacks' elevated risk of infant mortality and deaths from homicide in young adulthood (Umberson et al., 2017). Limiting the analyses to adult child deaths that occurred when a parent was age 50 or older, the study found that 2.8% of persons age 70, 3.4% of persons age 80, and 7% of persons aged 90+ had experienced a child death after the age of 50.

For midlife and older adults, the death of a child even decades earlier has profound consequences. These include elevated rates of anxiety, depression, grief symptoms, and suicidal ideation; physical health problems including risk of cardiovascular disease, diabetes, some types of cancer, and mortality; poorer marital quality and even risk of marital dissolution (e.g., Rogers, Floyd, Seltzer, Greenberg, & Hong, 2008; Rostila, Saarela, & Kawachi, 2012). Child death, especially of an "only child" or geographically proximate child, also may deprive older adults of important supports including emotional, instrumental, transportation, and financial assistance, and legal help with advance care planning. Childless persons, by contrast, have developed long-standing social networks and coping strategies that help meet these agerelated needs (Carr & Khodyakov, 2007). Older bereaved parents also experience distinctive stressors from which their younger counterparts may be spared. They cannot seek solace in having another child (Rogers et al., 2008). They also are more likely than survivors of youthful child deaths to have lost an adult child to a stigmatized condition such as addiction, HIV/AIDS, homicide, or suicide (Floyd, Mailick Seltzer, Greenberg, & Song, 2013), which may elicit awkward rather than supportive responses from family, friends, and coworkers (Pitman, Stevenson, Osborn, & King, 2018).

Older men and women are affected differently by child death, and these patterns are shaped by the context of the loss and the parent-child relationship that preceded the death. In general, women report more intense and longer-lasting psychological symptoms, a function of their close ties with their children and the importance of parenting to their identities (Rogers et al., 2008). Relatively few studies have explored whether parents grieve the deaths of adult sons versus daughters differently, although emerging evidence suggests child gender matters in cultural contexts in which social roles and intergenerational exchanges are highly gendered. For instance, a prospective analysis of child bereavement among older adult participants in the Taiwanese Longitudinal Study of Aging (TLSA) found that older women (but not men) experienced significant declines in physical and mental health upon the death of a son (but not daughter); these effects were attributed to the greater practical and financial support provided by sons, as well as the prestige afforded by sons in a society with a strong cultural preference for male offspring (Lee, Glei, Weinstein, & Goldman, 2014).

The impact of an adult child's death also varies based on the context of the death, including its cause and forewarning. As with the study of spousal bereavement, longitudinal data enable researchers to explore how the preloss context, including the child's symptoms, need for parental caregiving, and nature of the preloss relationship affect older parents' bereavement process. Deaths that occur following long-term chronic illnesses such as cancer tend to be accompanied by anticipatory grief symptoms prior to the death (Van Humbeeck et al., 2013). Using data from multiple waves of the Wisconsin Longitudinal Study (WLS), Floyd and colleagues (2013) found that older mothers of adult children who died from long-term chronic illness had more depressive symptoms both before and 18 months after the death, relative to matched controls who had not experienced child death. These results suggest that chronic strains related to caregiving and witnessing a child's suffering are linked with anticipatory grief before the loss, and sadness following the loss. By contrast, sudden or unanticipated deaths such as murders or suicide are particularly distressing, as they tend to elicit symptoms of anger and shock, similar to PTSD (Young et al., 2012).

Bereaved parents generally experience fewer depressive symptoms over the long term when they possess coping resources including a capacity to find meaning in the death (Rogers et al., 2008), and personality traits associated with successful coping including agreeableness. By contrast, bereaved parents who score high on the personality trait of neuroticism experience more intense symptoms (Robinson & Marwit, 2006). Taken together, research on adult child bereavement is consistent with the broad themes of attachment theory and stress process models, such that the impact of a loss is contingent on the stressors that precede and follow, one's resources to cope with the loss, and one's level of closeness with the decedent (Bowlby, 1980; Pearlin et al., 2005).

Parental death

The death of a parent in old age is an expected life transition, given the parent's extreme old age. Even with rising life expectancies and the growth of the age 85+ and centenarian populations in the United States, the vast majority of US adults have lost a parent before they reach age 65. A recent analysis of data from the Survey of Income and Program Participation (SIPP), a nationally representative sample of US adults, found that 99% of persons aged 65+ had lost at least one parent and 91% had no living parents. Just 3% had a living father while 8% had a living mother. However, the risk of earlier parental death is powerfully shaped by social and demographic factors, with adults more likely to experience the premature death of a father rather than a mother, and African Americans and lower-income persons more likely than whites and higher-income persons to experience premature parental death (Scherer & Kreider, 2019). Consequently, latelife parental bereavement is especially likely to strike higher SES whites, given their parents' survival advantage.

Few studies explore the impact of recent parental death on older adults' well-being. Moss and Moss (1983–1984) attribute this gap to the fact that late-life mortality is normative, "on time," and anticipated, and thus less distressing than earlier parental losses. Moreover, they argue that most adult children have relatively limited daily contact with and are not dependent on their aging parent(s). As such, their daily lives may not be disrupted dramatically by the death, especially given a norm of residential independence in the United States and most wealthy western nations (Vespa, 2017). However, as more older adults die of protracted illnesses, their adult children play an increasingly active role in end-of-life decision-making (Carr & Khodyakov, 2007) and are the most common source of informal care to aging parents (Wolff & Kasper, 2006). Given adult children's high levels of engagement with their parents' health and healthcare, parental death remains "an unexpected crisis for most healthy, well-functioning adults" and "represents a rite of passage into a new adult and identity" (Umberson, 2003, p. 8).

The personal and family-wide impacts of parental death vary based on the gender of parent and child, and nature of the late relationship. An estimated 45% of adult children experience somatic reactions to the death of a parent and roughly 10%-15% report declines in overall health (Scharlach & Fredriksen, 1993). Symptoms of anxiety and depression often occur immediately after the death, yet rarely persist in the longer term and abate after 6 months. Umberson and Chen (1994) also found that older adults who had recently lost a parent displayed more frequent alcohol use and depressive symptoms than their peers without a parental loss, and effects were largest for those who had positive relationships with their late parent. Adult children tend to experience greater distress following maternal rather than paternal death (Umberson & Chen 1994) and when they had a close rather than a strained relationship with their late parent (Hayslip, Pruett, & Caballero, 2015). This is consistent with a core tenet of attachment theory: the most meaningful relationships are grieved most intensely.

Bereaved adult children's mental and physical health symptoms also are linked to the nature, context, and order of the death; some studies suggest that sudden deaths or deaths that the child feels partly responsible for are particularly likely to trigger symptoms of distress (Horowitz et al., 1984). However, other evidence suggests that parental death may serve as a

"wake-up call" for midlife and older adults; this new awareness of their own mortality may promote more mindful and positive health behaviors (Umberson, 2003). The impact of parental death is especially profound when the second parent dies, as the surviving child(ren) are now the eldest generation of the family and bear the responsibilities that accompany that position (Marshall, 2004). Some bereaved children, even in old age, report distress over being an "orphan." Yet this transition also has an unexpected benefit: sibling relationships may grow closer, as they develop new rituals and practices to make up for those previously upheld by their parents, such as family holiday meals. In sum, relatively few studies explore older adults' adjustment to elderly parents' deaths, yet the literature generally concludes that effects are short-lived, although the early weeks and months are marked by profound sadness and identity shifts, which are particularly acute when a second parent dies and the surviving child(ren) must assume the identity as the most senior member of their family line.

Sibling death

Studies of sibling bereavement in later life are surprisingly rare; most studies of the death of a brother or sister are focused on childhood and adolescence. This omission is puzzling, given that over three-quarters of older adults have at least one living sibling, and most have emotionally close and mutually supportive relationships (White, 2001). Theoretical writings suggest that sibling deaths may have profound effects on older adults because "it marks an end to what is expected to be one of the longest and most intimate relationships of a lifetime" (Mahon, 1997). The loss of a sibling is particularly consequential for unmarried and childless older adults, who often rely on siblings to serve as their caregivers (Freedman, 1996) and healthcare proxy responsible for end-of-life medical decisions (Carr & Khodyakov, 2007). Socially isolated older adults also are particularly reliant on their siblings for emotional and social support (Steptoe, Shankar, Demakakos, & Wardle, 2013).

Because the sibling bond is so long and enduring, sibling death is linked with heightened depressive symptoms. Part of this association is explained by the survivor's sense of personal vulnerability that is triggered by a sibling's demise (Cicirelli, 2009). Because most siblings are close in age and spent their formative years together, the death of one sibling may make the other acutely aware of his or her own mortality. Older adults also report feeling the loss of a role model, lost link to family and personal lineage, and a loss of security because their sibling was someone they depended

on in times of need (Steptoe et al., 2013). Studies based on national registry data reveal a link between sibling death and one's own mortality, although such studies generally fail to control for shared genetic or environmental risk factors. For instance, Swedish registry data find that bereaved siblings have twice the mortality risk of nonbereaved siblings, with particularly pronounced patterns for fatal stroke, myocardial infarction, and suicide (Rostila et al., 2012).

Despite the physical and emotional toll associated with sibling loss, resilience and positive outcomes also are common. Some bereaved adult siblings report a greater sense of meaning in life, heightened personal strength, an awareness and enthusiasm about new possibilities, and in the case of deaths from stigmatized causes like HIV or suicide, a greater sensitivity to others (Wright, 2016). Relationships among surviving siblings also grow closer following parental death (Moss & Moss, 1989), and siblings with strained relationships may work to make amends, especially as they cope with the challenges of aging including illness, cognitive decline, and caregiving for and making end-of-life decisions for their parents (Hays, Gold, & Pieper, 1997; Khodyakov & Carr, 2009).

Friends and confidants

Friends and confidants beyond one's family are an important and seldom explored source of support to older adults, although theoretical writings suggest they are particularly important and thus their deaths particularly difficult. Friendships, unlike family ties, are entered into by choice rather than blood or law. Their primary purpose is companionship; unlike family ties, friendships can be abandoned when the relationship ceases to be emotionally rewarding (Allan, 1998). Older adults, especially those who have limited time horizons ahead, tend to pare down their social networks to include only their closest and most meaningful ties, thus the loss of these purposively maintained ties can be distressing (Charles & Carstensen, 2007).

The death of a friend is a common and anticipated later-life transition. One analysis of data from the National Social Life, Health, and Aging Project (NSHAP) estimated that roughly 7% of men and 11% of older women have lost a close friend to death over the past 5 years. Surprisingly few studies examine the personal toll of these losses (Cornwell & Laumann, 2018). Several studies suggest that the deaths of friends and confidants have short-term deleterious effects for older adults' emotional well-being, including depressive symptoms (d'Epinay, Cavalli, & Guillet, 2010). The relatively weak and short-lived effects of friend

deaths partly reflect the fact that older adults do not typically rely on friends and acquaintances for health-enhancing supports. Empirical evaluations of hierarchical compensatory models show that friends tend to provide older adults companionship only and are rarely called on to provide assistance with medication, meals, rides, and other types of support that uphold older adults' physical health and functioning—leaving these tasks to spouses, children, and siblings (Cantor, 1979). Consequently, while the death of a friend does deprive older adults of emotional support and companionship, it does not typically rob them of other essential supports.

Qualitative explorations reveal another important pathway to older adults' resilience following friend or confidant death; they tend to seek solace among other members of their friendship network, to reminisce and celebrate the life of the decedent (Roberto & Stanis, 1994). These results are consistent with theoretical writings suggesting that older adults may compensate for the loss of a relationship by replacing it with a comparable social tie; while spouses or children may be viewed as irreplaceable, more casual acquaintanceships may be at least partially replaced by new ones.

Animal companions

Social gerontologists have recently intensified their focus on the role of animal companions in the lives of older adults (Thorpe & Kelley, 2019). Empirical and theoretical work affirms the importance of this inquiry as nearly half of older adults have pets (Gallup Poll, 2006), and theoretical writings underscore the importance of "nonhuman social interaction" in everyday life (Cerulo, 2009). Evidence regarding the protective effects of animal companions on older adults' physical and emotional well-being is equivocal and varies based on the outcome considered. However, researchers and practitioners generally agree that pets provide a sense of routine (e.g., daily walks), purpose, and social connectedness to older adults, so the death of a pet may trigger symptoms of sadness, loss, or isolation (Wood et al., 2015).

Most research to date has focused on small, nonrepresentative, or cross-sectional studies only, yet the evidence suggests broad parallels between pet loss and other types of bereavement, where the psychological consequences vary based on the context of the loss and one's other coping resources. For instance, the negative psychological consequences of pet death are especially pronounced for older adults who lived in private homes rather than residential communities, had greater attachment to their pet, and had less effective

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coping skills (Krause-Parello & Gulick, 2013). Future research is needed to identify the implications for older adults of other types of long-term separations from pets, including home evacuations and relocations following natural disaster or moves into long-term facilities that do not allow pets (Fox & Ray, 2019). These residential transitions are acute stressors that require immediate readjustment, and chronic strains that involve longer term adaptations to living in a new environments. The loss of the social support provided by a pet could be further detrimental to older adults also managing the loss of place (Bibbo, Curl, & Johnson, 2019).

Future directions

Bereavement is a common later-life experience that generally takes a toll on older adults' well-being, although the intensity and duration of its impact are powerfully shaped by personal, relational, and contextual factors. The cause and context of the death as a risk factor for bereaved persons' adjustment has garnered some scholarly attention, including studies of sudden versus prolonged deaths (Carr et al., 2001) and deaths that follow intensive caregiving (Schulz et al., 2008). However, this work has only scratched the surface. Social, economic, and political changes are transforming how young and midlife adults in the United States die, and these changes may be particularly consequential for the well-being of decedents' aged parents, grandparents, spouses, and others.

First, "deaths of despair"—or deaths due to suicide, drug overdose (especially heroin and opioids), and alcohol abuse-increased steadily in the late 2010s in the United States, disproportionately afflicting midlife persons of lower socioeconomic status. Between 1999 and 2016, persons aged 45-64 of all racial and ethnic background witnessed increases in mortality rates (Woolf et al., 2018). During the same period, deaths from suicide increased by 33% (Curtin & Hedegaard, 2019). These statistics mean that aged parents with midlife children, and retirement-age adults with slightly younger spouses or siblings, among others, are increasingly vulnerable to family bereavement due to stigmatized conditions, which may undermine the support they receive, and may intensify their feelings of guilt that they couldn't "do more" to save their loved one (Feigelman et al., 2018). Deaths related to substance use also may come at the end of a long period of family strife and financial strain, especially for costly addiction treatment programs that may deplete older adults' retirement savings (Feigelman et al., 2018). Yet anecdotal evidence suggests that older bereaved persons may find purpose in working to seek a cure for or raise awareness of the disease that took their loved one's life. Future research should identify risk (and resilience) factors that may undermine (or sustain) bereaved elders through this devastating transition.

Second, homicide rates in the United States are among the highest of wealthy western nations, with 4.43 violent gun deaths per 100,000 residents in the United States (compared to just 0.06 in the United Kingdom). Although these rates translate into small numbers in absolute terms, African Americans are especially vulnerable. Recent data suggest that black men are 2.5 times as likely as white men to be killed by a police officer, and 1.5 times as likely to be murdered overall (Edwards, Esposito, & Lee, 2018). These violent deaths may take a profound emotional toll on the victims' grandparents or parents, depriving them of potential caregivers, or requiring them to take on the role of custodial grandparent to the grandchildren left behind. Murders, in particular, are considered unjust deaths and may render older adults vulnerable to anger, an especially harmful emotional reaction as it may elevate one's risk of cardiovascular conditions (Chida & Steptoe, 2009) and "push away" those significant others who would otherwise be a source of love and support (Keltner, Ellsworth, & Edwards, 1993).

Third, researchers know relatively little about the bereavement experiences of persons growing old under conditions of extreme adversity. Most bereavement research relies on large sample survey data sets or help-seeking samples; both of these populations are overrepresentative of those who are socially engaged, capable of participating in a survey, or who are seeking help. Consequently, those growing old under highly adverse circumstances, including homebound, homeless, imprisoned, detained, displaced, or impoverished older adults often are systematically excluded from such studies. Over the past 5 years, social scientists have paid increasing attention to the vast social and economic disparities evident among older adults (e.g., Abramson, 2015; Carr, 2019), as well as those displaced due to natural disasters (Merdjanoff, Piltch-Loeb, Friedman, & Abramson, 2019) or political upheavals (Madi et al., 2019). A core theme of stress process models is that the accumulation of chronic and acute stress is most harmful, yet few studies explore how bereavement affects those older adults living with concurrent strains such as food and housing insecurity, imprisonment, or the loss of long-standing social supports due to political or disaster-related displacement. Understanding the sources of vulnerability and resilience among highly disadvantaged older adults typically absent from population-based research will be critical for developing targeted interventions.

Conclusion

Late-life bereavement is a complex and multifaceted process; as such there is no single intervention, policy, or practice that will uniformly benefit all older adults. However, we propose three main sites of intervention that may help older bereaved persons manage the emotional and practical strains related to loss. First, access to mental health screening and treatment may critical for older adults who experience bereavement-related distress. The Affordable Care Act (ACA), established by President Barack Obama in 2010, ushered in expanded Medicare coverage for annual wellness visits includes screening for depression and other mood disorders, problematic substance use, and cognitive impairment. During the Medicarereimbursed wellness visit, the practitioner also reviews the patient's risk factors for depression and will make referrals for counseling as needed (Bartels, Gill, & Naslund, 2015). The future of the ACA is uncertain, yet continuation of screening and assessment, at a minimum, is essential to protecting the mental health of bereaved older adults in the United States.

Second, bereaved older adults, especially widow(er) s, require support to help manage RO tasks like housework, personal care, and finances. For most older adults, family members are the first line of support, yet employed family members may not have the wherewithal to juggle work and caregiving, which may compromise their own health. Continued investments in caregiver support at the federal, state, and corporate levels may enable kin to provide care to bereaved older adults. The Family and Medical Leave Act (FMLA), enacted in 1993, offers up to 12 weeks of unpaid leave to workers who need to care for a family member. However, only half of all workers are covered by FMLA. Four states offer more generous family leave public insurance programs: California, New Jersey, New York, and Rhode Island. These programs may enable workers to provide care for their bereaved older relatives, or may help older workers to minimize caregiving strains that may render them vulnerable to distress after their family member dies. Expanded employer programs also may be effective, although just 12% of private sector workers currently receive paid family leave. Innovations like the proposed federal Family and Medical Insurance Leave (FAMILY) Act would create a shared fund that makes paid leave affordable for employers of all sizes, as well as workers and their families. The Social Security Caregiver Credit Act would offset lost contributions during those spells when workers take their unpaid family care leave. Creative policies are needed to address the needs of bereaved older adults and their caregivers (Carr, 2019).

Third, the proliferation of new information and communication technologies (ICT) may help socially isolated older adults to manage their symptoms of grief, loss, and loneliness. More than three-quarters of US adults aged 65+ currently use the internet, nearly half use social networking sites, and more than onethird use smartphones, opening new possibilities for bereavement support (Anderson & Perrin, 2017). Online bereavement support groups may provide a sense of community, camaraderie, and peer support as older adults adjust to loss while remembrance and memorial sites online enable older adults to "continue bonds" with their deceased loved one (Van der Houwen, Stroebe, Schut, Stroebe, & Van den Bout, 2010). Social networking sites also provide older adults virtual contact with potential sources of support that extend beyond their immediate circle of friends and family (Walter, Hourizi, Moncur, & Pitsillides, 2012). "Smart home" technologies help physically remote caregivers to monitor their bereaved loved ones' safety and contact emergency service providers as needed. Robotic pets have shown promise in supporting older adults' social and emotional needs of older adults (McGlynn, Kemple, Mitzner, King, & Rogers, 2017). Telemedicine applications can help caregivers to monitor older adults' symptoms and arrange for care as needed (Czaja, 2016). Despite the promise of emerging technologies, their effectiveness of and older adults' receptiveness to them are unclear, with some evidence suggesting they cannot provide the hands-on emotional and personal care that older adults desire, especially under conditions of distress (Lehoux & Grimard, 2018).

Bereavement is an inevitable aspect of aging, so innovations in policy, practice, and technology will continue to be critical in meeting the needs of current and future cohorts of older adults. As this chapter has shown, the conditions under which death occurs, and the ways that bereaved persons cope and react to loss vary widely based on multiple factors, including their sociodemographic characteristics. As successive cohorts of older adults grow increasingly diverse on the basis of race, ethnicity, family structure, socioeconomic status, functional status, and other personal characteristics, programs and interventions to meet their needs will also need to become increasingly diverse and sensitive to differences (Federal Interagency Forum on Aging-Related Statistics, 2016).

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