Geriatric Disorders (K Zdanys, Section Editor)



A Systematic Review of Treatment Options for Grieving Older Adults

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Abstract

Purpose of review The purpose of this systematic review was to characterize the studies published on grief interventions for bereaved older adults in the last 5 years. Grief intervention studies were included that exclusively focused on older adults as well as those that included older adults in their samples, in order to summarize the most up-to-date treatment options available for bereaved older adults.

Recent findings Twenty-four articles that investigated grief interventions in older adults were identified. Generally, findings suggest that viable treatment approaches for bereaved older adults are those incorporating behavioral activation and guidance on restoration-oriented coping. However, similar to studies of broader adult populations, grief interventions had small effects on grief-related symptoms in older adults. Few studies examined age as a moderator of treatment effects. Studies varied greatly by study design, sample size, and outcomes measured, which all likely impacted the efficacy of results.

Summary This review suggests that, while there has been a growing focus on older adults who have unique vulnerabilities in bereavement, the evidence base of efficacious

interventions for this population is limited. Given the need for specialized bereavement support for older adults will increase in the coming years, future research should prioritize rigorous investigations of grief treatment options leveraging technology to increase access and incorporate techniques that enhance engagement in life and connectedness for this vulnerable population.

Introduction

Older adults (OAs) are likely to experience multiple significant losses as they age [1, 2]. It is often assumed that, because the likelihood of bereavement increases with age, OAs are naturally equipped to adapt to loss. However, a significant subset are at high risk for experiencing debilitating mental health challenges in bereavement [3], such as prolonged grief disorder (PGD) [4, 5], depression [6, 7], anxiety [8, 9], posttraumatic stress disorder (PTSD) [10], existential distress [11, 12], and loneliness [13, 14]. The prevalence of bereavement-related psychological disorders in OAs varies, with approximately 9-25% of bereaved OAs developing PGD [5, 15, 16], 15% experiencing depressive symptoms [6, 17], 20% anxiety symptoms [18], and 9-16% experiencing bereavement-related PTSD [10, 19, 20]. These bereavement-related psychiatric disorders often co-occur and have been linked to numerous negative physical health outcomes [21], including cognitive decline [22-25], vascular disease [26], hospitalizations and over- or under-use of healthcare services [27, 28], suicide [22, 29, 30], and mortality [31, 32].

Numerous factors may contribute to OAs' heightened risk for negative bereavement outcomes, including changes in social [33, 34], financial [22, 35], and practical support [36]; isolation and loneliness [14, 37, 38]; and potentially simultaneously coping with pre-existing chronic illness [39], reduced mobility [40], and cognitive decline [41]. OA caregivers of OAs with a chronic or life-limiting disease such as Alzheimer's, dementia, or cancer are at particular risk for bereavement complications [42, 43]. Despite this, few bereavement interventions have demonstrated efficacy in treating grief symptomatology in OAs [44, 45].

To put this in context, prior reviews have suggested that, in general, grief interventions have marginal efficacy in broader adult populations [46, 47], and the majority of grief intervention reviews have not focused on OAs. A recent meta-analysis of grief interventions found that age-moderated treatment effects, with mean older age associated with larger effects at follow-up time points [46]. A systematic review [47] of grief interventions for adults, including OAs, found that complicated grief treatment (CGT) [48] and family-focused grief therapy [49] were the most efficacious in reducing complicated grief (similar to prolonged grief). Only a single review focused specifically on grief interventions for OAs, identifying three treatment modalities tested in OA bereaved spouses: emotional expression/support, psychoeducation, and a mind-body approach [44], with only the mind-body intervention demonstrating efficacy [44]. Although valuable, this review was completed in 2013 and was limited by solely reviewing interventions for spousal loss [44] and not other types of losses. The purpose of the present systematic review, therefore, was to characterize grief intervention studies published in the last 5 years and to include interventions targeting all types of losses (e.g., spouse, child, sibling) experienced by OAs.

Method

Search strategy

All procedures were conducted according to guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria [50]. On January 25, 2019, a comprehensive electronic literature search was conducted in the following five databases: Medline (PubMed), Embase.com, CINAHL (EBSCO), PsycInfo (Ovid), and the Cochrane Library (Wiley). Results were restricted to items in English published from January 1, 2009 to the search date. The search was designed in PubMed using MeSH subject headers and keywords, and then translated to other databases.

Three concepts were combined in the search strategy using the AND operator: seniors (e.g., aged, geriatrics, elder, older adult), grief (e.g., attitude to death, bereavement, grief), and interventions (e.g., mental health services, social support, counseling, initiative, program, therapeutic). Results were compiled using the citation management tool EndNote and duplicates were removed following the Bramer method [51]. For a complete strategy, see the accompanying PubMed search displayed in Appendix A.

Selection strategy

Studies were deemed eligible for inclusion if they described a psychotherapy or psychotropic intervention for bereaved individuals. Preventative interventions for pre-loss caregivers were not included, nor were studies on usual care provided to the bereaved post-loss such as condolence cards. Studies that did not clearly indicate that they included OAs (~ 65+) in their sample were excluded. Studies which included OAs but did not specifically target OAs were included to fully capture the breadth of which interventions have been tested with OAs. Studies on interventions that did not target bereavement-related outcomes were excluded (see Fig. 1 for PRISMA). To present the latest treatment options and to build upon a prior review focusing on grief intervention studies for OA spouses published up to 2013 [44], the qualitative synthesis focused on intervention studies published between 2013 and January 2019 and included all loss types.

Screening process

After duplicates were removed, titles were randomly assigned to two coders and reviewed independently for initial eligibility. The remaining articles were included in the abstract review stages. In the initial full-text review, two coders reviewed each article to ensure that they met inclusion criteria. When there was disagreement between two coders, discrepancies were discussed; a third coder made the final decision if consensus could not be reached. Finally, the first author completed a standardized template for each article to extract prespecified information from the included articles.

Treatments: systematic review results

Overview of treatments

A total of 3705 records were reviewed after duplicates were removed, and a final sample of 24 full-text articles underwent qualitative synthesis (see Fig. 1 for PRISMA). Half of the studies (n = 12) focused on assessing interventions with exclusively bereaved OAs. Though the remaining studies (n = 12) did not exclusively target OAs, they included OAs in the sample and thus were reviewed for relevance. Many of the studies included only (n = 7) or mostly (n = 4) spousal/partner-bereaved individuals. While several of the studies did not report cause of death (n = 10), those that did (n = 12) included individuals bereaved by heterogeneous causes (e.g., chronic illness, accident). Inclusion

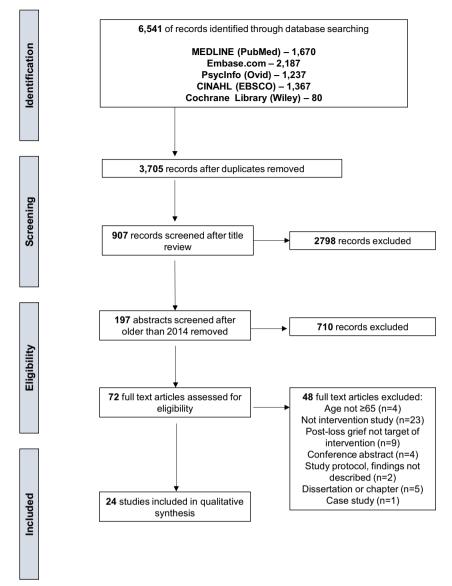


Fig. 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram.

criteria differed among the studies: 11 used a threshold of varying levels of PGD or complicated grief (CG) symptoms¹, 1 used a threshold of degree of avoidance and social adjustment [52•], and 12 did not screen for clinical symptoms.

Study design and rigor varied, but most studies (n = 15) reported using a randomized controlled design. The remaining studies were characterized as non-randomized open trial [53 $\bullet\bullet$], quasi-randomized [54], randomized open-case series [55 $\bullet\bullet$], single condition with no control [56, 57, 58 \bullet], or randomization was not clearly specified [59, 60 \bullet]. All but three studies [56, 57, 58 \bullet] utilized a control arm; however, the type of control varied, with 11

¹ Studies varied in their use and measurement of prolonged grief or complicated grief. Results are reported according to how each study labeled and measured these constructs of pathological grief.

studies using an active treatment control (e.g., supportive psychotherapy [52 \bullet], psychoeducation [61 \bullet •]), 6 using waitlist control, and 4 using usual care. While more than half of the studies (n = 14) reported utilizing a manualized intervention, only 6 of the studies reported conducting formal treatment fidelity checks. Most studies included a follow-up time point in addition to post-intervention assessments (n = 16), but timing of follow-up varied from 6 weeks to up to 15 months.

The most common intervention approaches were variations of cognitive-behavioral therapy (CBT; n = 6) [60•, 62–66], interventions based on the dual-process model of grief (n = 4) [54, 61••, 67••, 68], and CGT (n = 3), which incorporates elements of both CBT and the dual-process model [69••, 70, 71•]. Most interventions were delivered individually (n = 20) and in person (n = 21). In four studies, the intervention included either a telemental health [57, 71•] or web-based component [53••, 65]. About three-fourths (n = 15) of the 21 studies that utilized a control arm demonstrated preliminary efficacy of the experimental intervention on primary outcomes, with complicated or prolonged grief (n = 14) and depression (n = 13) being the most common intervention targets (see Table 1).

Cognitive-behavioral therapies

A quarter of the studies reviewed (n = 6) investigated CBT-based interventions, which included grief psychoeducation, modification of maladaptive lossrelated thoughts, fostering of adaptive thoughts (e.g., positive memories of the deceased), and behavioral activation, which may be particularly relevant for OAs because it can address isolation and be helpful even in the context of cognitive decline [76] (see Table 1). Only one CBT study specifically targeted OAs [60•], which found preliminary evidence for a group-delivered CBT intervention in improving spiritual well-being and emotional intelligence in widowed OAs in a nursing home. No other bereavement outcomes were described in this report [60•]. Five additional studies examined the efficacy of CBT interventions with samples that included OAs. These included studies of CBT paired with exposure [62], metacognitive grief therapy [66], and CBT versus eye movement desensitization and reprocessing [63, 64]. Litz et al. [65] found that their CBT internet-based self-management intervention, healthy experiences after loss (HEAL), showed preliminary, large effects on reducing PGD symptoms and noted how it could address access and mobility issues in bereaved OAs.

Interventions informed by the dual-process model of grief

Three studies (see Table 1) examined interventions designed specifically for OAs based on the dual-process model of grief [77, 78], which asserts that adaptive grieving involves a natural oscillation between loss-oriented coping (e.g., emotional processing of grief) and restoration-oriented coping (e.g., (re)engaging in activities, developing new relationships/roles, distraction from grief). Interventions based on this model focused on facilitating these coping processes. These included a Chinese group-based intervention, Dual-Process Bereavement Group Intervention-Chinese (DPBGI-C), which targeted widowed OAs [67••]; a 4-week self-care in bereavement (SCB) intervention targeting the needs of bereaved OAs [61••]; and life after loss (LAL), a 14-week group-based

Table 1. Description of design and outcomes of studies reviewed. Studies differentiated by those that focused on exclusively older adults and those that included older adults in samples of adults broadly.

| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
|---|---|--|---|---|---|
| Exclusively older adult samples Chow et al. (2018) Bereaveme [67••] Interventic (DPBGI-C; restoration loss-orient | adult samples • Dual-Process Model Bereavement Group Intervention-Chinese (DPBGI-C; based on restoration and loss-oriented coping) | • N = 125 • Age range: 60 or older • M _{age} = 74.3, SD = 7.5 • Type of loss: spousal • Type of death: unspecified | • Single-blind cluster RCT • Control group: loss-oriented bereavement group intervention-Chinese (LOBGI-C) • Inclusion criteria: score above 22 on ICG • Use of treatment manual: yes • Treatment fidelity checks: not reported | • Complicated Grief (CICG) • Depression (HADS-C) • Loneliness (DJGLS-C) • Social support (ISS) | Both groups had lower levels of grief and depression post-intervention and follow-up DPBGI-C more effective than LOBGI-C at post intervention (Cohen's d = 0.35 to 0.56) for primary outcomes (grief, depression, loneliness) DPBGI-C had significant improvement in anxiety over LOBGI-C (d = 0.41) at follow-up Age not assessed as a support of the significant in anxiety over LOBGI-C (d = 0.41) at follow-up |
| Hershenberg et al. (2015) [58•] | • 5 sessions over 5 weeks of behavioral activation treatment (psychoeducation and adherence to weekly planners) | • N = 20 • Age range: not reported • M _{age} = 65.7, SD = 11.8 • Type of loss: loved one • Type of death: unspecified | Single arm study No control Inclusion criteria: 13 or greater on CGA-I and at least 1 risk factor for CB Use of manual: yes Treatment fidelity checks: not reported | • Grief symptoms (CGA-I) • Depression (BDI-II) • Engagement in functional, pleasurable, and social activities on symptoms: weekly planner | • CGA-I (Cohen's d = 0.72) and BDI (Cohen's d = 0.69) significantly decreased post-intervention • No significant relationship between the total number of or type of activity on outcome measures • Post hoc power analyses indicate sample size was too small • Age not assessed as moderator |

| | Results | Sole significant result was mean difference in restoration-oriented scale for IWDL for treatment group (mean increase from 31.0 to 33.9) No significant mean differences in hope No significant mean differences for control group Age not assessed as moderator | 94% of VR and 100% of grief website participants would recommend the intervention to a friend So Both groups showed significant rates of decrease in grief severity, grief cognitions, loneliness, yearning, perceived stress, and improvements in global sleep quality over the three study timepoints (p < 0.05) VR group showed significant rates of decreased depressive symptoms (Cohen's d = 1.02) over the three |
|----------------------|------------------|---|--|
| | Outcome measures | • Hope (HHI) • Grief (HGRS; IDWL) | • Depression (GDS) • Grief (ICG; GCQ) • Loneliness (UCLA; YSL) • Perceived stress (PSS) • Sleep (PSQI) • Social support assessed by two face-valid items |
| | Design/method | • RCT • Control group: waitlist • Inclusion criteria: none provided • Treatment manual: yes • Treatment fidelity checks: not reported | Non-randomized open trial Control group: grief website Inclusion criteria: none reported Manual: not reported Fidelity checks: not reported |
| | Sample | • N = 19 • Age range: 61–85 • M _{age} : not provided • Type of loss: spousal • Type of death: advanced cancer | • N = 28 • Age range: not reported but only recruited ages 50+ • Mage VR group = 67.0, SD = 10.73; Mage active control = 72.83, SD = 11.55 • Type of loss: spouse or romantic partner in past 1–3 years • Type of death: unspecified |
| inued) | Intervention | • Finding balance intervention (self-administered expressive writing) | Virtual reality (VR) support group (1 h twice a week for 8 weeks totaling 16 sessions) |
| Table 1. (Continued) | Author | Holtslander et al. (2016) [72] | Knowles et al. (2017) [53••] |

| Table 1. (Continued) | inued) | | | | |
|----------------------|---|---|--|--|--|
| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
| | | | | | with grief website group but not on other outcomes • Results remained significant when controlling age |
| Nam (2016b) [71•] | Complicated grief treatment modified for OAs, 8 2-h weekly sessions | • N = 89 • Age range: not reported • $M_{\rm age} = 67.45$, | • RCT • Control group: supportive psychotherapy (8 2-h ses- sions weekly) | Complicated grief (ICG) Depression (GDS) Functional impairment | CGT with support provider showed large and significant effects on grief |
| | For isolated OAs, therapist telephone calls in lieu of a "supportive | SD = 2.79 • Type of loss: unspecified | Inclusion criteria: score5 or higher on BDCGAManual: yes | (WSAS) | (Cohen's $d = 1.02$) and depression (Cohen's $d = 0.91$) but |
| | person" | Type of death: unspecified | Fidelity checks: not reported | | small effect on functional |
| | | | | | impairment (Cohen's $d = 0.28$). |
| | | | | | • CGT with therapist |
| | | | | | less efficacy than CGT |
| | | | | | with support provider; |
| | | | | | telephone call only versus |
| | | | | | control were not reportedResults remained |
| | | | | | significant when age controlled |
| Nam (2016a) | • Self-care in bereave- | $\bullet N = 168$ | • RCT | Complicated grief | • SCB had significant |
| | ment (SCB; 4-session | • Age range: not | • control group: | (109) | main errects or |
| | therapy on restoration-oriented | reported • Mag = 72.07, SD = | psychoeducation on CG | Post-traumatic growth (PGI) | reducing Itb scores (Cohen's $d = 0.66$) |
| | coping based on the | 6.11 | • Inclusion criteria: | Self-efficacy | and increasing PGI |
| | dual-process model) | • Type of loss: spousal | 25 or higher on ICG | (BSES) | (Cohen's $d = -1.06$) |
| | | Type of death: unspecified | Manual: not reportedFidelity checks: | | and BSES scores (Cohen's <i>d</i> =– 1.28) |
| | | | not reported | | |

| Table 1. (Continued) Author Inte | tinued) Intervention | Sample | Design/method | Outcome measures | Results |
|--|--|---|---|---|---|
| (year) | | | | | Results remained significant when controlling age |
| Pfoff et al. (2014) [73••] | • Functional therapy (20-session intervention focused on sleep hygiene and lifestyle regularity) | • N = 38 • Age range: 60–84 • M _{age} = 72, SD = 6.9 • Type of loss: spousal • Type of death: unspecified | • RCT • Control group: 20-session intervention focused on emotional issues • Inclusion criteria: none reported • Manual: main body of experimental and control sessions followed a treatment manual • Fidelity checks: not reported | Grief (TRIG) Depression (HRSD) Sleep (PghSD, PSQI) | Both treatment groups experienced significant improvement in outcomes over time FT group showed better improvement in HRSD, PghSD (specifically time spent asleep and sleep efficiency) over time (ps < 0.05) Age was found to be insignificant as covariate |
| Pishvaei et al. (2015) [74••] | • Group-based life review with integrative reminiscence | • $N = 34$ • Age range: 60–80 • $M_{age} = 69.41$, SD = 5.72 • Type of loss: s pousal • Type of death: unspecified | Control group: assessment only Inclusion criteria: none reported Manual: not reported Fidelity checks: not reported | Self-esteem (RSES)Anxiety (AGAS) | Experimental group showed significant improvement in self-esteem and decrease in anxiety compared with control (ps < 0.05) Findings remained significant when controlling for age |
| Shear et al. (2014) [69••] | • CGT (manualized 16-session therapy based on dual-process model) | • $N = 151$ • Age range: 50–91 • $M_{\rm age} = 66.1$, SD = 8.9 • Type of loss: mostly spousal, also parent, child, other • Type of death: unspecified | • RCT • Control group: interpersonal psychotherapy • Inclusion criteria: 30 or higher on ICG and confirmed CG through clinical interview • Manual: yes (unpublished) | • Complicated grief (SCID-IV-CG; complicated grief-focused-CGI-I; CSSSR; ICG) • Grief-related avoidance (GRAQ) • Functional impairment (WSAS) | Intention to treat analysis found significantly greater response for CGT than IPT CGT group significant decrease in CGI (p = 0.01), IPT group still moderately ill post-treatment. |

| Table 1. (Continued) | nued) | | | | |
|---|--|---|--|--|---|
| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
| | | | | | Greater improvement on WSAS, GRAQ, and BDI for CGT group At 6-month follow-up, response maintained for 100% of CGT responders and 86% of IPT Findings were not moderated by age |
| Solaimani Khashab et al. (2017) [60•] | • 8-session group CBT treatment tailored to grief | • N = 30 • Age range: 60–75 • M _{age} : not reported • Type of loss: not specified • Type of death: unspecified | Randomization unclear Control group: assessments only Inclusion criteria: none reported Manual: not reported Fidelity checks: not reported | Spiritual well-being (SWBS) Emotional intelligence (EIQ) | • Significant difference between pre- and post for control group on EI and experimental group on both SWBS and EIQ (ps < 0.05) • Greater improvement in SWBs and EIQ in CBT group than control • Age not assessed as moderator |
| Stahl et al. (2017) [55••] | Behavioral self-monitoring (BSM; sleep, diet, exercise) using goal-setting, monitoring of attention, and diany. Participants provided with tablets for diany. BSM was paired with motivational interviewing (MI) | • N phase 1 = 10 • N phase 2 = 13 (not completed) • Age range phase 1: 70–87 • Age range phase 2: not reported • Median age phase II: not reported • Median age phase II: not reported • Type of loss: spousal loss within last 8 months • Type of death: | Randomized open-case series testing BSM alone against BSM+MI Randomization for proposed phase II Inclusion criteria: at-risk for mental illness based on: high medical morbidity, functional disability, or subthreshold depression (HRSD of 9-14), amxiety (GAD-7 a 10) and/or complicated grief (ICG = 20) Manual: yes Fidelity checks: yes | • Depression (HRSD; PHQ-9) • Anxiety (GAD-7) • Complicated grief (ICG) • Symptom burden (measure not reported) | Phase I compliance with recording sessions was 61%, increased to 88% in phase II after technology improvement Depression and anxiety scores, but not CG, decreased post-intervention for both BSM and BM+MI (significance not reported) Phase II not completed at time of publication |

| Table 1. (Continued) | inued) | | | | |
|---|---|---|---|--|---|
| Author (year) | Intervention | Sample | Design/method | Outcome measures | Results |
| Utz et al. (2014) [68] | • Life after loss (LAL; 14-week group intervention based on dual-process model of bereavement with skill building for loss and restoration-oriented coping) | • N = 328 • Age range: 50 or older • M _{age} = not reported • Type of loss: spouses and domestic partners • Type of death: unspecified | RCT Control group: traditional support group focused on only loss-oriented coping Inclusion criteria: none reported Manual: no Fidelity checks: not reported | Depression (GDS) Grief (TRIG) Loneliness (UCLA) Stress-related growth (SRG) Self-care and daily living scale (developed for study) | • Age not assessed as moderator • Both arms showed statistically significant improvement in depression, grief, loneliness, and stress-related growth (ps < 0.05) • LAL group did not perform better than control on outcomes • Confidence in managing healthcare significantly more improved in LAL group than control. • Age not assessed as moderator |
| Included older a Ando et al. (2014) [56] | Included older adults in sample Ando et al. • 2-session (2014) bereavement-focused [56] life review | • N = 20 and older • Mage = 68.8, SD = 11.7 • Type of loss: spousal (n = 18) or child (n = 2) • Type of death: unspecified | Single arm study Control group: none Inclusion criteria: none specified Use of manual: not reported Treatment fidelity checks: not reported | Spirituality (FACIT-Sp) Depression (BDI-II) | BDI-II scores significantly decreased pre-to-post intervention (t = 2.1, p = 0.045) FACIT-Sp scores did not significantly change pre- to post-intervention (p < 0.05 Age not assessed as moderator |
| Bryant et al. (2014) [62] | • 10 weekly 2-h group sessions of CBT and 4 weekly 1-h individual sessions with exposure | • <i>N</i> = 80 • Age range: 17–70 • <i>M</i> _{age} CBT + exposure group = 51.0, SD = 4.4 | RCT Control group: CBT alone Inclusion criteria: Meet diagnostic criteria for PGD; cutoff not provided | Complicated grief (ICG) Depression (BDI-II) PTSD (CAPS-1, PTCI) | • Follow-up: CBT+exposure led to greater reductions in complicated grief (Hedge's $g = 1.77$), |

| Table 1. (Continued) | inued) | | | | |
|------------------------------|---|---|---|----------------------------------|---|
| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
| | | • M_{age} CBT group = 54.8, SD = 9 • Type of loss: partner ($n = 11$), child ($n = 14$), other ($n = 5$) • Type of deaths: sudden illness ($n = 9$), chronic illness ($n = 22$), accident ($n = 6$), or suicide ($n = 4$) | • Use of manual: yes • Treatment fidelity checks: yes (20% of audiotapes of each condition were randomly selected and rated | • Quality of life (WHO QOL-BREF) | depression (Hedge's g = 1.31), negative appraisals of self (Hedge's g = 1.06), and functional impairment (Hedge's g: 1.31–1.77) than CBT alone • Fewer treatment completers in CBT+exposure condition (14.8%) met criteria for PGD than those in the CBT condition (37.9%) at follow-up • Age not assessed as moderator |
| Cotter et al. (2017) [63] | • 7 weekly sessions CBT or Eye Movement Desensitization and Reprocessing (EMDR) | • N = 19 • Age range: 22–75 • M _{age} = 45.6, SD = 15.52 • Type of loss: spousal (n = 8), parent (n = 6), child (n = 2), girfriend/boyfriend (n = 1), other family member (n = 2) • Type of death: unspecified | Control group: waitlist Inclusion criteria: none; participants self-identified as experiencing difficulty in coping with the death of a loved one Use of manual: protocol used for both EMDR and CBT Treatment fidelity checks: yes | • Thematic analysis | Participant feedback similar and positive for both therapies Reported developments in insight, a positive shift in emotions, increased activity, improved self-confidence and a healthier mental relationship to the deceased CBT group described the acquisition of emotion regulation tools and improvements in grief EMDR group reported more distance from distressing memories Age not assessed as moderator |

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| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
| Kealy et al. (2017) [52•] | • Short-term interpretive psychotherapy. 90-min sessions once a week for 12 weeks (insight-oriented intervention focusing on conflicts and trauma associated with loss and developing tolerance for ambivalence) | • <i>N</i> = 110 • Age range: 22–74 • <i>M</i> _{age} = 45.2, SD = 11.7 • Type of loss: parent (<i>n</i> = 61), sibling (<i>n</i> = 12), partner (<i>n</i> = 13, child (<i>n</i> = 11), friend (<i>n</i> = 4), grandparent (<i>n</i> = 2), other (<i>n</i> = 7) • Type of death: unspecified | • RCT • Control group: short-term supportive psychotherapy. 90-min sessions 1×/ week for 12 weeks • Inclusion criteria: score 10 or higher on: ICG, intrusion or avoidance subscales of IES; and a 2 or higher on one of six subscales of the SAS-SR • Manual: yes | • Complicated grief (IBACS; ICG-R) • Post-traumatic stress (IES-R) • General psychological distress (SCL-90-R) | Experimental group associated with improvements post-intervention and in 6-month follow-up general symptoms, grief symptoms and life satisfaction (p < 0.05) No significant association between age and treatment outcome found |
| Litz et al. (2014) [65] | HEAL (CBT-assisted internet-delivered intervention involving grief psychoeducation and behavioral activation) Designed to increase accessibility, including for older adults No formal exposure or cognitive reappraisal | • N = 84 • Age range: not reported • Mage = 55.37, SD = 10.3 • Type of loss: spousal (n = 29), partner (n = 3), parent (n = 4), sibling (n = 2), relative (n = 2), friend (n = 1) with cancer | eRT, stratified block design Control group: 6-week waitlist control Inclusion criteria: 23 or higher on PG-13 and functional impairment in social, occupational, or household responsibilities as indicated on PG-13 Manual: not reported Fidelity checks: not reported | Prolonged Grief (PG-13) Depression (BDI-II) Anxiety (BAI) PTSD (PCL-C) Drug abuse (DAST; AUDIT) | HEAL (across all conditions) resulted in significant reduction of PG-13 (Cohen's d = 1.10), BDI (Cohen's d = 0.85), and PCL (Cohen's d = 0.92) scores at each follow-up assessment (ps < 0.02) Significant difference between conditions at post treatment Post-intervention 6% of HEAL participants met criteria for PGD, compared with 24% in control pared with 24% in control Age not assessed as moderator |
| Meysner et al. | • 7 weekly sessions CBT or eye movement | • <i>N</i> = 19 • Age range: 22–75 | • RCT | PTSD (IES)Dissociation (DES-II) | Participants with higher levels of grief |

| | Results | ety more substantial improvement in outcomes • Both conditions saw decrease in IES, DASS, ICG (all $ps < 0.05$) • No significant difference between efficacy of control and experimental condition on outcome measures • Age not assessed as moderator | 14 out of 16 recruited and eligible participants completed all time points Participants in either group did not develop syndromal PCBD Age not assessed as moderator | • Experimental group greater improvement on grief ($\eta^2 = 0.64$) and depression ($\eta^2 = 0.38$) than control at post-intervention |
|----------------------|------------------|--|---|--|
| | Outcome measures | Complicated grief (ICG) Depression and anxiety (DASS-21) Quality of life (QOLS) | Grief (ICG) Depression (PHQ-9; DSM-V criteria for MDD) | • Complicated grief (ICG) • Depression (CES-D) |
| | Design/method | • Control group: waitlist before randomization to an active treatment • Inclusion criteria: none reported • Manual: yes • Fidelity checks: not reported | Feasibility and acceptability pilot study acceptability pilot study Inclusion criteria: participants that met criteria for PCBD (ICG > 20) or MDD within first 9 months of loss given IPT. Remaining participants given peer support and IPT if symptoms worsened Control group: none Inclusion criteria: none reported Manual: yes Fidelity checks: not reported | RCT Control group: psychoeducation only Inclusion criteria: score 5 or higher on BDCGA Manual: not reported |
| | Sample | • $M_{age} = 45.6$, SD = 15.52 • Type of loss: spouse ($n = 8$), parent ($n = 6$), child ($n = 2$), girlfriend or boyfriend ($n = 1$), other family member ($n = 2$); 5 participants suffered multiple losses • Type of death: unspecified | • $N = 14$ • Age range: not reported • $M_{age} = 70.4$, SD = 12.22 • Type of loss: spouse ($n = 6$), parent ($n = 6$), child ($n = 1$), nephew ($n = 6$) • Type of death: unspecified | • <i>N</i> = 42 • Age range: 21–73 • <i>M</i> _{age} = 45.57, SD = 13.04 • Type of loss: unspecified |
| ontinued) | Intervention | desensitization and reprocessing (EMDR) | Two-tiered peer support and interpersonal psychotherapy model Peer support: telephone contact every 1-2 weeks for supportive "check-in" IPT: weekly sessions via telephone or face-to-face | Psychoeducation on grief and social support both arms Experimental group: participants interviewed twice about their interpersonal |
| Table 1. (Continued) | Author (vear) | [64] | Miller et al. (2018) [57] | Nam (2016c) [75•] |

| Table 1. (Continued) | inued) | | | | |
|------------------------------------|---|--|---|--|--|
| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
| | relationships; support providers also offered psychoeducation coaching on bereavement support | • Type of death: unspecified | • Fidelity checks: not reported | | Experimental group had significant indirect effect on follow-up grief (95% CI (-3.17,-1.35)) and depression (95% CI (-1.96,-0.65)) scores dependent on whether the support received was perceived as helpful No significant differences by age in treatment outcome |
| Nappa et al. (2016) [59] | Bereavement groups (focused on positive verbalization, re-exposure of grief experience in a safe group context) | • N = 124 • Age range: 39–86 • Mage: not provided • Median age = 64.5 • 63% of sample 61+ • Type of loss: mostly spousal • Type of death: unspecified | • Controlled, prospective intervention study • Control group: those who declined/unable to participate in group completed questionnaires • Inclusion criteria: none reported • Manual: not reported • Fidelity checks: not reported | • Grief (TRIG) • Depressions (HADS) | • Grief and depression scores did not change significantly over time for participants • Participants who were unable to participate experienced greater anxiety and depression than group members at 1-year follow-up • Age not assessed as moderator |
| Newsom et al. (2017) [54] | •Community Based Bereavement Counseling (CBBC; unstructured, individual counseling informed by dual-process model) | • N = 344 • Age range 20–85 • Mage = 49.3, SD = 14.20 • Type of loss: partner (n = 75), parent (n = 75), sibling (n = 11), child (n = 18), other friend/relative (n = 7) • Type of death: unspecified | • Quasi-randomized longi- tudinal controlled investigation • Control group: 18-month no intervention observation period • Inclusion criteria: none; individuals actively sought help (no routine referrals) • Manual: not reported • Fidelity checks: not reported | Complicated grief (IBACS, ICG-R) Post-traumatic stress (IES-R) General psychological distress (SCL-90-R) | • Decrease in CG symptoms from baseline to post-intervention in both groups, but CBBC not significantly more efficacious than control • Intervention group had greater decrease in CG between post-intervention and follow-up than control |

| Table 1. (Continued) | tinued) | | | | |
|--------------------------------|---|---|--|---|--|
| Author (vear) | Intervention | Sample | Design/method | Outcome measures | Results |
| | | | | | Age not assessed as moderator but study completers older on average |
| Shear et al. (2016) [70] | • Complicated grief treatment (CGT; manualized 16-session therapy) with placebo or Citalopram (CIT) | N = 395 Age range: not reported, 18-95 eligible Mage = 53, SD = 14.5 Type of loss: charter | • RCT • Control group: CBT+placebo • Inclusion criteria: 30 or higher on ICG and confirmed CG through | • Complicated grief (SCID-IV-CG); Complicated grief-focused CGI; ICG) | • Greater response to CGT with placebo than placebo alone or to CGT with CIT. • Greater response to citalopram with addition of CGT (werens CTT alone) |
| | | (n = 70), parent $(n = 41)$, child, $(n = 28)$ other $(n = 12)$; most causes | • Manual: yes | Grief-related avoidance (GRAQ) Depression (QIDS-SR16) Suicidal ideation | • CIT response not different from placebo alone. |
| | | of death due to illness • Type of death: unspecified | | (Columbia Suicide Scale modified for bereavement) | different improvements in MDD for CIT group, even with CGT and CIT combined. |
| Wenn et al. | Metacognitive grief | • N = 22 | • Pilot RCT | Prolonged arief | moderator Significant reduction |
| (2019) [66] | therapy (MCGT is a 6-session intervention based on grief | Age range: 38–78 Mage = 62, SD = 11.2 Two of loss: narmer | Control group: waitlist Inclusion criteria: score of at least 26 on PG-13 | (PG-13) • Depression (DASS-21) • Rumination (UGRS) | in PGD in MCGT group (Cohen's $d = 1.68$) |
| | psychoeducation and a metacognitive model) | (n=8), parent $(n=3)$, child $(n=1)$ | Manual: yes Fidelity checks: yes | Metacognition (MCQ-30) | severity in waitlist control |
| | | • Type of death: sudden $(n = 3)$, chronic | | • Quality of life (Q-LES-Q-18) | Age not assessed as moderator |
| | | illness $(n = 7)$, accident $(n = 2)$ | | Global improvement (CGI) | Significant differences in depression (Cohen's d = |
| | | | | | 1.28), anxiety (Cohen's d = 0.77), stress, (Cohen's d |
| | | | | | = 1.03), rumination (Cohen's $d = 0.91$),, and QoL (Cohen's $d = 0.56$) in |

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| | Results | MCGT compared with control • No significant differences for metacognition • Improvements were maintained for MCGT group 3- and 6-months post-intervention |
|------------------------|------------------|---|
| | Outcome measures | |
| | Design/method | |
| | Sample | |
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464S, Ahvaz General Anxiety Scale; AUDIT, Alcohol Use Disorders Identification Test; BAI, Beck Anxiety Inventory; BDI-II, Beck Depression Inventory-Revised; BDCGA, Brief Dimensional Complicated Grief Assessment; BSES, Brief Self-Efficacy Scale; CES-D, Center for Epidemiologic Studies-Depression Scale; CICG, Chinese Inventory of Complicated Grief; CGI, Clinical Global Impressions Scale; CAPS-1, Clinician-Administered PTSD Scale-1; CSRS, Columbia Suicide Severity Rating Scale; CG4-1, Complicated Grief Assessment Interview; 036L5-C, De Jong Gierveld Loneliness Scale—Chinese Version; DASS-21, Depression Anxiety Stress Scales-21; DES-II, Dissociative Experiences Scale—II; DAST, Drug Abuse Screening Genatric Depression Scale; GCQ, Grief Cognitions Questionnaire; GRAQ, Grief-Related Avoidance Questionnaire; HRSD, Hamilton Rating Scale for Depression; HHI, Herth Hope Index; HADS, Hospital Anxiety and Depression Scale; HADS-C, Hospital Anxiety and Depression Scale—Chinese Version; HGRS, Hogan Grief Reaction Checklist; IES. Impact of Events Scale; IES-R. Impact of Events Scale-Revised; ICG, Inventory of Complicated Grief; ICG-R, Inventory of Complicated Grief, Revised; IDML, Inventory of Daily Widowed Life; ISS, Inventory of Social Support; MCQ-30, Metacognition Questionnaire—30; PHQ-9, Patient Health Questionnaire—9; PSS, Perceived Stress Scale; PqhSD, Pittsburgh Sleep Diary; PSQI, Pittsburgh Sleep Quality Index; PGI, Post Traumatic Growth Inventory; PTCI, Posttraumatic Cognitions Inventory; PG-13, Prolonged Grief Inventory; PCL-C, PTSD Checklist; 7RIG, Texas Revised Inventory of Grief; Q-LES-Q-18, Quality of Life Enjoyment and Satisfaction Questionnaire—18; QOLS, Quality of Life Scale; QIDS-SR16, Quick Inventory of Depressive Symptoms—Self Report; RSES, Rosenberg Self-Esteem Scale; SWBS, Spiritual Well-Being Scale; SRG, Stress-Related Growth Scale; SCID-IV-CG, Structured Clinical Interview for Complicated Grief; RCL-30-R, Symptom Checklist–90-Revised; TRIG, Texas Revised Inventory of Grief; IBACS, The Inventory of Bereavement Adaptation–Cruse Scotland; UCLA, UCLA Loneliness Scale; UGRS, Utrecht Grief Rumination Scale; WSAS, Work and Social Adjustment Scale; WHO QOL-BREF, World Health Organization Quality of Life Scale-Brief; VSL, Yearning in Situations of Loss Fest; EIQ, Emotional Intelligence Questionnaire; FACTF-Sp, Functional Assessment of Chronic Illness Therapy—Spiritual Well-Being Scale; 64D-7, Generalized Anxiety Scale; 6DS,

intervention involving psychoeducation and skill building for both loss- and restoration-oriented coping in OAs [68]. These interventions aimed to address the unique restoration-oriented needs of bereaved OAs (e.g., psychoeducation about obtaining support for meal preparation, finances, independent living). DPBGI-C resulted in moderate effects on reduced CG and depression [67••] and SCB demonstrated large effects on reducing CG [61••] when compared with loss-oriented coping control conditions. In contrast, LAL was not superior to a loss-oriented control group in improving grief, depression, and loneliness [68]. Finally, though not focused exclusively on OAs, a study of community-based grief counseling and dual-process model training demonstrated preliminary efficacy in improving CG in a sample of bereaved individuals up to age 85 when compared with a no-intervention control group [54].

Complicated grief treatment

Two included studies investigated the efficacy of complicated grief treatment (CGT), which draws on the dual-process model of grief and utilizes CBT-based exposure techniques, in bereaved OAs (see Table 1). Shear et al. [69 • •] found that OAs reported significantly greater reductions in CG symptoms after receiving CGT when compared with interpersonal therapy (IPT). The authors noted that they expanded their sample from ages 65+ to 50+ years in the last 8 months of recruitment, and they did not find a statistically significant moderating effect of age [69••]. In a separate study that did not focus only on OAs, Shear et al. [70] found that bereaved adults who received CGT alone and those who received CGT with citalogram demonstrated greater treatment responses than those who received citalogram alone. Of note, traditional CGT involves a support provider (e.g., trusted family member or friend) in sessions, which may be a challenge for isolated OAs. To address this, Nam [71•] investigated whether, in cases in which a participant did not have a support provider, a weekly telephone call from the CGT therapist would be helpful. CGT (support provider and telephone call formats combined) demonstrated efficacy over supportive counseling with moderate effect on CG and CGT with a support provider was more effective than CGT with therapist telephone contact. This suggests alternatives for a support provider for isolated OAs need further investigation.

Behavioral interventions

Three studies investigated the efficacy of behavioral interventions for bereaved OAs. Behavioral interventions broadly focus on reducing experiential avoidance, increasing positive reinforcement for engaging in pleasurable activities, and skill building (see Table 1). One study [73••] found that functional therapy, a behavioral intervention focusing on sleep hygiene, demonstrated greater improvements in depression and sleep quality and efficiency than emotion-focused therapy in a small sample of spousal/partner-bereaved OAs. Stahl et al. [55••] found that a behavioral selfmonitoring intervention focusing on sleep, diet, and exercise with and without motivational interviewing showed preliminary efficacy for reducing symptoms of depression and anxiety but not CG in a small sample of widowed OAs. Finally, Hershenberg et al. [58•] found a moderate effect

of a psychoeducational and behavioral activation intervention on CG and depression symptoms in a small sample of bereaved OAs; however, this trial lacked a control arm, limiting interpretation of their findings.

Life review interventions

Two studies investigated the efficacy of life review interventions on bereaved adults, with one specifically focusing on OAs (see Table 1). Life review interventions involve a therapist facilitating reminiscence on significant memories and events using interview prompts. Pishvaei et al. [74••] investigated the effect of a group-based life review intervention that included reframing past conflicts and challenges, a process referred to as integrative reminiscence, to foster greater self-knowledge in a small sample of OA widowers. Compared with a time-only control group, the intervention group experienced improvements in the primary outcomes, self-esteem, and anxiety. Ando et al. [56] investigated the efficacy of a two-session bereavement-oriented life review that involved reflection and construction of photo album with significant words/phrases in a mostly OA sample, though the study recruited adults broadly. While participants in the intervention experienced significantly reduced depression and increased sense of spirituality, the study did not use a control arm and did not examine age as a treatment moderator, limiting conclusions that can be drawn about its effects among OAs [56].

Interpersonal psychotherapies

Two studies examining interventions that focused on interpersonal challenges and social support included OAs in their broad sample of adults (see Table 1). Nam et al. [75•] assessed the impact of psychoeducation about grief and social support alone or psychoeducation paired with an interview about interpersonal conflicts and found the addition of the interview resulted in moderate effects on CG and depression compared with psychoeducation alone; participant age did not moderate intervention effects. Miller et al. [57] utilized a two-tiered intervention in which recently bereaved adults were first offered peer support and then IPT if their symptoms did not improve. This early intervention model demonstrated promise as participants in neither intervention arm developed a syndromal persistent-complex bereavement disorder (similar to prolonged grief); however, given this was a feasibility and acceptability study, significance of this finding was not assessed. Although most participants were OAs, the influence of age on treatment effects was not assessed.

Expressive therapies

Two studies investigated the efficacy of interventions promoting emotional expression, with one [72] assessing an expressive writing intervention for bereaved OAs, and another [59] evaluating the impact of emotional expression bereavement groups comprised mostly of OAs (see Table 1). Neither study found promising efficacy of the interventions in improving primary outcomes (e.g., hope and grief-related coping [72], depression and CG [59]). Furthermore, it is possible that the primary outcomes measured did not capture how emotional expression in group interventions is beneficial, such as addressing the loneliness and isolation bereaved OAs commonly face.

Insight-oriented psychotherapy

Only one study [52•] investigated the efficacy of an insight-oriented group psychodynamic therapy (see Table 1). The psychodynamic intervention demonstrated superior preliminary efficacy in reducing CG symptoms over supportive psychotherapy. Though this study did not target exclusively OAs, they assessed for age-related differences in outcomes and found no association, suggesting the intervention was just as effective for OAs.

Non-traditional intervention

One study investigated a virtual reality-based support group for bereaved OAs in which group members had virtual avatars to simulate being present in a group [53••] (see Table 1). Participants could participate from any location by using a software program called Second Life, designed for OA widows who may have difficulty accessing an in-person group. Compared with an online psychoeducational control arm, the virtual reality group demonstrated a significant, large effect on depression. Both groups reported improvements in grief, loneliness, and sleep [53••]. Notably, while this study only reported preliminary efficacy, most participants acknowledged they would recommend the intervention to a friend [53••], suggesting the acceptability of digital interventions for OAs.

Discussion

Summary of findings

Findings from this systematic review suggest that CGT, dual-process model-based, and behavioral interventions may be most relevant and efficacious for reducing symptoms of pathological grief among bereaved OAs. Studies of these interventions exclusively focused on OAs and similarly focused on supporting OAs with re-engaging in life and managing independent living in bereavement. Although these treatments show promise for bereaved OAs, only 12 of the 24 studies reviewed exclusively focused on OAs. Samples of OAs differed widely in age ranges, with some including adults aged 50+. None investigated the efficacy of grief interventions on the "older old" (individuals 85+). Given most interventions reviewed were not tailored specifically for OAs, they may not have addressed unique developmental considerations for bereaved OAs, such as possible dwindling social networks [33, 34], physical frailty [39-41], and existential concerns around one's own mortality and sense of meaning in life [11, 12]. This was particularly notable for the studies reviewed investigating CBT approaches, which were largely understudied with exclusively OAs, yet have demonstrated efficacy with bereaved adults more broadly [47]. The one trial of CBT that focused on bereaved OAs did not describe how this group intervention was tailored to their needs and did not assess grief or depression symptoms as other CBT interventions have [60•]. Consistent with prior reviews, we found that both studies exclusively focused on OAs and those that included OAs in broader adult samples resulted in relatively small effects on bereavement outcomes [46, 79]. Also similar to prior reviews, the studies had wide heterogeneity in rigor, design, inclusion criteria, and outcomes. Thus, the findings of this review must be considered in the context of the methodological limitations of the studies.

Methodological limitations of treatment studies

The primary limitation of the studies reviewed was the limited number focusing on OAs or examining age as a moderator of treatment effects. While there have been increased efforts to employ more rigorous methods in the study of grief interventions (RCT design) [47], few studies utilized both a usual care or waitlist control and active treatment control condition (e.g., supportive psychotherapy). Studies on grief interventions often only use an active treatment comparator because of ethical concerns about neglecting the bereaved while they are acutely distressed [80]. Yet, given the intensity of grief symptoms commonly dissipates over time, it is valuable to observe a comparison group. A compromise in some studies has been to provide enhanced usual care or to use a waitlist control to ensure distressed bereaved individuals have access to some form of support. Notably, nearly all the studies, including those that demonstrated efficacy of interventions over control, were underpowered; therefore, only preliminary efficacy was shown. With only a few exceptions, most reports did not provide information about treatment fidelity; thus, findings should be interpreted with this in mind [81].

As has been previously recommended to increase the rigor of bereavement research [46, 47, 79], half of the studies targeted bereaved individuals reporting greater challenges by screening for PGD or CG. Grief interventions have been shown to be, at best, ineffective and, at worst, harmful for those experiencing normative grief [79]. Thus, there has been a growing emphasis on targeting those suffering from bereavement-related mental health challenges and having explicit inclusion criteria for both intervention research and clinical practice. This may be especially relevant for bereaved OAs, as age-related assumptions can contribute to under- or misdiagnosis and inappropriate treatment of bereavement-related mental health challenges. While basing inclusion on a symptom threshold is critical, the studies reviewed varied widely in the screening measures and cutoff scores used. This heterogeneity in screening has been previously noted as a limitation of grief intervention studies [46] and is in part due to a lack of consensus in the field as to (a) what form(s) of psychopathology to target (e.g., PGD, depression, PTSD) and (b) validated cutoff scores for measures of PGD or CG specifically. Notably, these issues common to grief intervention research may soon be resolved as the field is arriving at a consensus on diagnostic criteria for PGD. It is currently included in the International Classification of Disease, Eleventh Revision and the revised 5th Edition of the Diagnostic and Statistical Manual of Mental Disorders is preparing to add PGD as a new disorder, pending final empirical validation.

Similarly, across the studies reviewed and those described in previous reviews, primary outcomes selected were heterogeneous, though most focused on PGD, CG, and/or depression. There was also substantial variability in the outcome measures used, which has been attributed in part to the lack of established criteria or recommended assessment tools in bereavement research [46]. Study samples were diverse with respect to participant age, relationship to the deceased, and cause of death. Such factors can contribute to risk for negative bereavement-related mental health outcomes [82] and therefore may also impact response to intervention. While the age range of participants in the studies reviewed was wide, none included the "older old" (85+ years), who may be particularly isolated as members of their peer support network die.

Half of the studies primarily focused on spousal/partner loss which is consistent with a prior review of interventions for bereaved OAs [44]. While bereaved spouses/partners make up a sizeable portion of bereaved OAs, it is imperative to also consider other types of loss, as many OAs may experience loss of siblings, parents, friends, and, in some cases, children [6]. Finally, many studies did not report cause of death or included a sample with wide variation in cause of death, despite this potentially being a significant factor in predicting grief outcomes [83] and OA caregivers of individuals with dementia being at particular risk for negative bereavement outcomes [43].

Conclusions

The current review suggests there may be viable treatment approaches for bereaved OAs, particularly those incorporating behavioral activation and guidance on restoration-oriented coping. Investigations of applications of other approaches tailored to the needs of OAs have been limited. It is important to note, however, that this review did not include potentially effective interventions published before 2013. Though limited in scope by its focus on bereaved spouses, a previous review of grief interventions for OAs published between 1990 and 2013 suggested a mind-body intervention showed promise for improving bereavement outcomes, potentially by addressing somatic manifestations of emotional distress [44]. While the present review did not identify recent studies on such interventions, future work should examine a mind-body focus as a possibility for reducing distress in bereavement. Additionally, this review was limited to only those interventions delivered to bereaved OAs postloss. Interventions designed to be delivered pre-loss to prevent negative bereavement outcomes may have potential utility for OAs, most notably familyfocused grief therapy [47, 49].

Future studies should not only test evidence-based treatments for grief with OAs but also should consider their unique needs, most notably significant social isolation, access and mobility issues, potential cognitive decline, and existential distress. Researchers can learn from efforts made to address other mental health concerns in non-bereaved OAs, including depression interventions adapted for those with cognitive impairment [84] and interventions that have leveraged technology (e.g., whether telemental health, computer based [85], or internet based [86]), to reduce treatment barriers. Studies have demonstrated OAs are receptive to eHealth technology use [53••, 55••, 87, 65,] and that web-based interventions can be effective in reducing social isolation in OAs [88].

Future intervention development endeavors should also address an oftenneglected clinical topic that has particular relevance for OAs, namely existential challenges. Bereaved OAs, particularly those experiencing PGD and depression, have been found to experience substantial threats to their sense of meaning in life and personal mortality [11, 12, 89, 90]. Furthermore, bereaved OAs often experience social isolation and loneliness as they lose members of their social network [14, 37]. Therefore, OAs who have experienced a significant loss may benefit from a meaning-centered intervention to facilitate meaningful engagement in life and connection to others [91, 92]

In addition to the limitations of existing grief interventions to address certain unique needs of OAs, future research on grief interventions should consider increased methodological rigor, including specificity in sampling and screening for mental health challenges. Particularly relevant to bereaved OAs and consistent with Nseir and Larkey's [44] review, there is a limited evidence base of treatment options for the older old (85+). It is imperative not to ignore individuals 85+, as they are a growing population [93] at heightened risk for loneliness and underutilization of health and social services [94]. Given the overrepresentation of spousal/partner loss in bereavement intervention studies with OAs, further evaluation of effective grief interventions in OAs experiencing other types of loss is necessary. Screening for mental health challenges in bereavement is an issue relevant to all age groups [95] but may be particularly relevant to OAs given potential stereotyped assumptions about emotional fragility [96]. Thus, for intervention research, it is critical to utilize a standard in screening methodology and clinically it is important for providers on the frontline of treating OAs, such as primary care providers, to be able to differentiate those who may need intervention and those who are normatively grieving.

The results of this review indicate behavioral activation and promotion of (re)engagement in life are integral to enhance social connections and improve mood in bereaved OAs, as is identifying those most in need of targeting support. Such intervention approaches could be enhanced by focusing on existential distress. Finally, interventions for bereaved OAs should aim to increase access to treatment by leveraging technology such as telehealth or web-based interventions.

Compliance with Ethical Standards

Conflict of Interest

Rebecca M. Saracino, Wendy G. Lichtenthal, Taylor Coats, and Kailey E. Roberts received grants from the National Cancer Institute.

Leah E. Walsh, Justin Fogarty, Johanna Goldberg, and Holly Prigerson declare no conflicts of interest.

Human and Animal Rights and Informed Consent

This article does not contain any studies with human or animal subjects performed by any of the authors.

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