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Systematic Review

Efficacy of Psychological Interventions for Family Caregivers in End-of-Life Care and Bereavement: A Systematic Review

Olga Ribera-Asensi[1], Marián Pérez-Marín[2], Selene Valero-Moreno[2,*]

[1]Child Mental Health Unit, Hospital Arnau de Vilanova, 46980 Paterna, Spain
[2]Department of Personality, Assessment and Psychological Treatments, Faculty of Psychology and Speech Therapy, Universitat de Valencia, 46010 Valencia, Spain
*Correspondence: selene.valero@uv.es (Selene Valero-Moreno)

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Abstract

Background: This study reviews psychological interventions targeting caregivers during the end-of-life phase of a loved one's life, a period associated with high levels of emotional distress and an increased risk of prolonged grief disorder (PGD). **Methods:** In accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, the initial search yielded 163 records. After applying the five-year publication limit and removing duplicates, 55 records remained for screening. Following the screening and eligibility assessment, 11 studies were included in the review, focusing on interventions delivered in palliative care and intensive care unit (ICU) settings. **Results:** The analyzed strategies included psychological therapies, self-help tools, and peer support interventions. In palliative care settings, the primary objective was to mitigate emotional distress and facilitate grief processing. Conversely, in ICU settings, interventions primarily focused on decision-making support and psychoeducation. **Conclusions:** While the interventions demonstrated potential benefits, methodological quality was heterogeneous, underscoring the need for more rigorous designs and standardized outcome measures to optimize clinical support for family caregivers in end-of-life care and bereavement.

Keywords: caregivers; end-of-life patients; psychological intervention; grief; systematic review; palliative care

1. Introduction

The end-of-life phase presents significant emotional and practical challenges for both patients and caregivers, requiring adaptation to impending loss (Hudson et al., 2018). As populations age and healthcare systems face increasing strain, reliance on family caregivers has grown (Spatuzzi et al., 2022).

Caregivers often experience significant psychological burden (Parro-Jiménez et al., 2021), including depression, anxiety, posttraumatic stress disorder, and prolonged grief disorder (PGD) (Barreto-Martín et al., 2012; Martinez-Martin et al., 2008).

Prolonged grief has gained recognition as a disorder (Prigerson et al., 2021), now included in both International Classification of Diseases 11th Revision (ICD-11) (World Health Organization, 2019) and the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) (American Psychiatric Association, 2022). Cognitive-behavioral therapy (CBT) and newer therapeutic approaches, including arts-based interventions such as music therapy, have shown effectiveness in supporting bereavement (Hudson et al., 2018), aiming to prevent long-term psychological consequences by addressing immediate coping needs (Currier et al., 2010). However, internet-based interventions for caregivers remain limited (Wagner et al., 2020). Identifying the mechanisms underlying prolonged grief and caregiver outcomes at end of life is essential for informing the development of theory-informed interventions and understanding how these interventions may achieve their intended effects (Eisma and Stroebe, 2021; Skivington et al., 2021).

Positive outcomes for caregivers are often associated with effective communication within healthcare teams in both palliative and acute care settings (Nelson et al., 2010; Trevino et al., 2019). Conversely, some interventions target families or caregiver-patient dyads, supporting relational approaches (Ribera-Asensi et al., 2024).

In end-of-life care, grief-specific therapeutic approaches (Kustanti et al., 2021) and manualized interventions for caregivers (Wagner et al., 2020) remain limited. Moreover, research on caregivers has frequently overlooked bereavement-focused interventions (Hudson et al., 2018) and is often constrained by methodological limitations that weaken the robustness of the evidence base (Candy et al., 2011; Gauthier and Gagliese, 2012). Although previous reviews have examined bereavement interventions in palliative care and intensive care unit (ICU) settings (Coelho et al., 2025; Foran et al., 2025), as well as broader caregiver support interventions (Kustanti et al., 2021; Rezaei et al., 2024), the present systematic review extends the existing literature in several ways. First, it focuses specifically on the effectiveness of psychological interventions for bereaved end-of-life caregivers, integrating both palliative care and ICU contexts within a unified frame-

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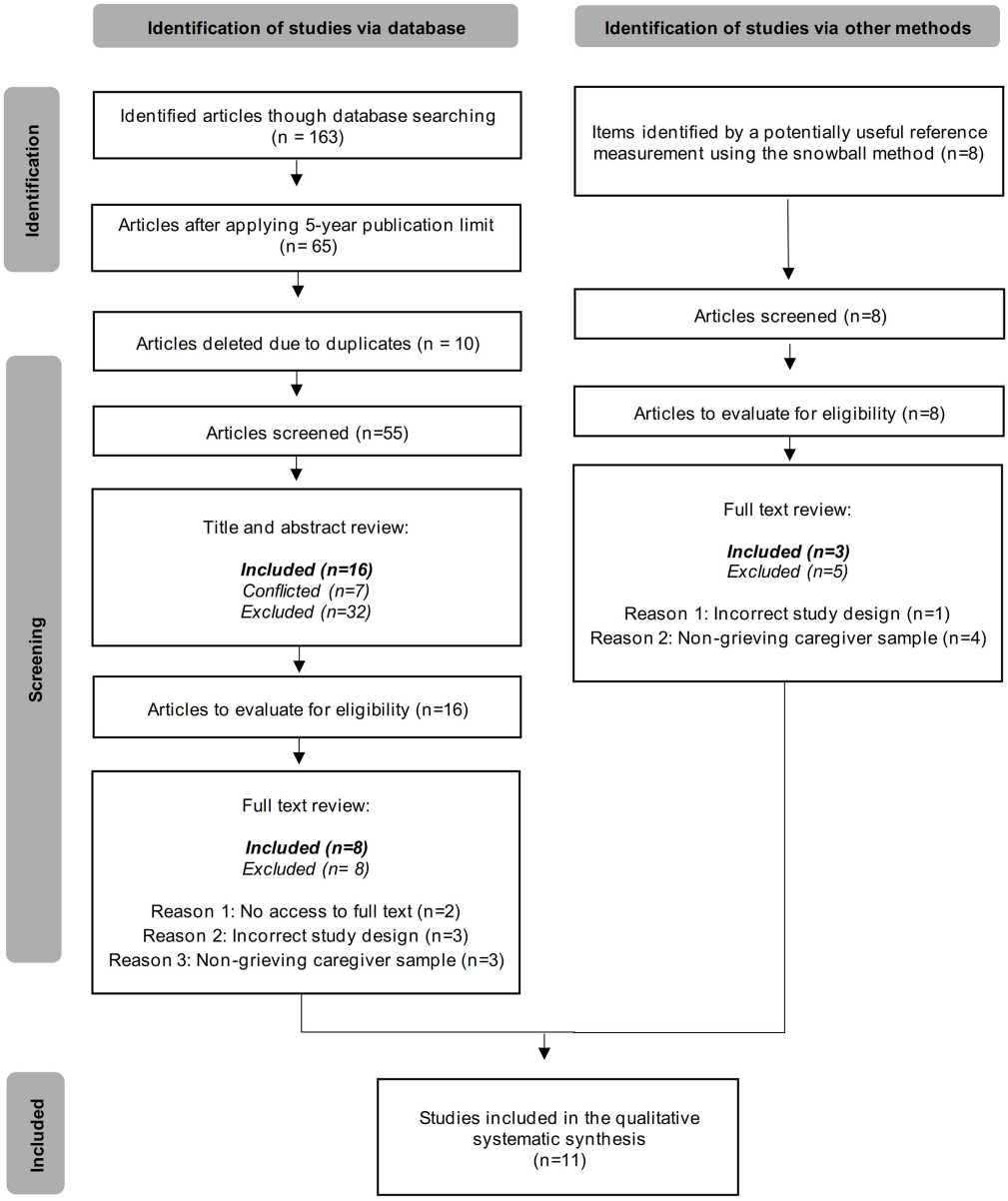


Fig. 1. PRISMA flow diagram of study selection.

work while emphasizing outcomes related to prolonged grief. Second, compared with previous reviews, this study incorporates a broader range of study designs and more recent evidence published between 2019 and 2024, including emerging approaches such as acceptance and commitment therapy (ACT)-based interventions, meaning-centered therapies, and dignity therapy. Finally, this review provides a structured comparison of intervention effects across settings and outcomes, together with a critical appraisal of methodological quality, an aspect that has often been insufficiently addressed in prior reviews. Therefore, rather than duplicating previous work, this review provides an updated, focused, and methodologically critical synthesis of the effectiveness of psychological interventions for family caregivers in end-of-life care and bereavement in end-of-life contexts.

As such, intervention programs designed for caregivers of end-of-life patients are both relevant and necessary. However, the primary interventions targeting this population and their effectiveness remain insufficiently understood. Psychological interventions in end-of-life contexts have shown promising results across healthcare settings, including ICU (Buckley et al., 2015) and palliative care (von Blanckenburg and Leppin, 2018). Therefore, the main objective of the present study was to assess the effectiveness of psychological interventions for caregivers of end-of-life patients. To this end, two primary objectives were established: (1) to systematically review and synthesize applied studies evaluating the effectiveness of psychological interventions for caregivers of end-of-life patients, and (2) to examine existing systematic reviews in this area to contextualize findings from original studies, identify ar-

eas of convergence and divergence, and highlight remaining conceptual and methodological gaps in the literature.

2. Materials and Methods

2.1 Procedure

A systematic review of psychological interventions for bereavement in end-of-life caregivers was conducted in accordance with PRISMA guidelines (Page et al., 2021). ProQuest and Web of Science (WOS) databases were searched on March 12, 2024, by two authors using the Boolean expression: (*psychol* intervention*) AND (*end of life*) AND ((*mourner**) OR (*caregiver*)) AND ((*grief*) OR (*bereavement*)). An initial search returned 163 studies, which were reduced to 65 after applying a 5-year publication limit. Following screening in Covidence (Veritas Health Innovation, Melbourne, Australia), 55 records underwent title and abstract screening. Of these, 32 were excluded and 7 were initially classified as conflicted, although all were ultimately excluded for failing to meet the eligibility criteria. Finally, 16 articles underwent full-text review, of which 8 were excluded. A manual snowball search identified 8 additional records, of which 3 articles were included and 5 were excluded, resulting in a final sample of 11 articles. The PRISMA flow diagram is presented in Fig. 1. This review was not registered in PROSPERO, as the protocol was developed retrospectively.

2.2 Inclusion and Exclusion Criteria

Inclusion criteria comprised studies examining psychological interventions for family caregivers in end-of-life care and bereavement of terminally ill patients, published in English within the past 5 years, and accessible through the University of Valencia databases. To ensure alignment with current clinical practice and recent theoretical developments (e.g., ACT-based and meaning-centered approaches), this review focused on studies published from 2019 onwards. This timeframe captures the most up-to-date evidence following the formal recognition of PGD in DSM-5-TR and ICD-11. Exclusion criteria included: (a) studies evaluating non-psychological interventions; (b) studies not focused on grieving populations; (c) studies not specifically addressing caregivers; (d) non-scientific publications (e.g., editorials, commentaries, or opinion papers); (e) studies without accessible full text; and (f) study designs not aligned with the objectives of this review, such as case reports and conference abstracts.

2.3 Data Extraction

Table 1 illustrated the pertinent findings of the studies included in this research, organized to two study types: applied studies and systematic reviews. For each study, the table summarizes key characteristics, including identification (first author and publication year), title, study design and results (Table 1).

2.4 Quality Assessment

Two authors (SV-M and OR-A) independently and blindly assessed the included quantitative studies using the "Quality Assessment Tool for Quantitative Studies" developed by the "Effective Public Health Practice Project" (Thomas et al., 2003). The tool assesses 7 criteria. Scores for each criterion and each study were independently assigned by 2 researchers (SV-M and OR-A) in a blinded manner. This tool evaluates 6 domains: selection bias, study design, confounders, blinding, data collection methods, and withdrawals or dropouts. Discrepancies were minimal and were resolved by consensus, resulting in overall study ratings of *Strong*, *Moderate*, or *Weak* based on the cumulative scores. Global ratings (*Strong*, *Moderate*, *Weak*) were derived from domain-level scores, such that studies with no weak ratings were classified as *Strong*, those with one weak rating as *Moderate*, and those with two or more weak ratings as *Weak*, following established guidelines (Thomas et al., 2003).

3. Results

Of the 11 articles included in the review, 8 articles were applied studies and the other 3 were systematic reviews. Accordingly, the Results section is organized into two parts. The first part presents the findings from the applied studies (research design and sample selection; inclusion and exclusion criteria; representativeness; variables; and confounders). The second part summarizes and compares the included systematic reviews in order to contextualize the evidence derived from original studies (studies included; search strategy; selection and data extraction; and inclusion and exclusion criteria).

3.1 Applied Studies

3.1.1 Participants

A total of 1218 caregivers of critically ill or palliative care patients were identified, excluding an estimated sample of 140 from Davis et al. (2019) and Prigerson et al. (2019).

Most studies define caregivers as family members, partners, or friends who provide daily informal care to the patient (An et al., 2020; Davis et al., 2019, 2020; Freitas et al., 2024; Lichtenthal et al., 2022; Prigerson et al., 2019; Wang et al., 2021), but also include significant others involved in health decisions (Davis et al., 2019, 2020) or ICU decision-making (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022). For clarity, "caregivers" refers to these individuals unless otherwise specified.

Most patients were receiving palliative care with a life expectancy ranging from 6 (Davis et al., 2019, 2020) to 12 months (An et al., 2020), often due to terminal cancer or hematologic malignancies (An et al., 2020; Freitas et al., 2024; Wang et al., 2021). Some studies focused on critically ill patients in ICUs (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022; Prigerson et al., 2019).

Table 1. Main characteristics of the included studies.

Applied studies (n = 8)			
First author and year	Title	Design	Results
Davis, 2019	An acceptance and commitment therapy self-help intervention for carers of patients in palliative care: Protocol of a feasibility randomized controlled trial	Protocol of a Two-arm Randomized Controlled Trial (RCT)	Protocol for ACT self-help intervention for caregivers.
Prigerson, 2019	Enhancing & Mobilizing the Potential for Wellness & Emotional Resilience (EMPOWER) among Surrogate Decision-Makers of ICU Patients: study protocol for a randomized controlled trial	Protocol in three phases: - Open Trial Phase. - Manual Refinement Phase. - Pilot RCT Phase.	EMPOWER study protocol targeting peritraumatic stress in ICU caregivers, with stakeholder input to improve the intervention.
An, 2020	The impact of the caregiver-oncologist relationship on caregiver experiences of end-of-life care and bereavement outcomes	Longitudinal analytical observational study, based on a secondary analysis of data from an RCT.	Longitudinal analytical observational study on caregiver-oncologist relationship. Positive relationships linked to better end-of-life care but no impact on psychological adjustment.
Davis, 2020	Feasibility randomized controlled trial of a self-help ACT intervention for grief and psychological distress in carers of palliative care patients	Two-arm RCT	Feasibility of ACT self-help for caregivers. Preliminary effectiveness analyses suggested small effects on acceptance, valued living, grief, and psychological distress. These preliminary findings do not establish its effectiveness in reducing prolonged grief symptoms.
Kentish-Barnes, 2022	A Cluster Randomized Trial of a Three-Step Support Strategy for Relatives of Patients Dying in the ICU	Multicenter Cluster-RCT	RCT on ICU caregiver support. Reduced prolonged grief and PTSD symptoms with intervention.
Wang, 2021	Effects of family participatory dignity therapy on the psychological well-being and family function of patients with haematologic malignancies and their family caregivers: A randomized controlled trial	Single-blind, Two-arm parallel group, RCT	RCT on family participatory dignity therapy. Improved well-being, family cohesion, and reduced caregiver anxiety and depression.
Lichtenthal, 2022	Development and preliminary evaluation of EMPOWER for surrogate decision-makers of critically ill patients	Two phases: - Manual refinement phase. - Single-arm Pilot Trial Phase.	Pilot trial of EMPOWER for ICU caregivers. Improved grief, anxiety, and avoidance.
Freitas, 2024	Life beyond Loss: A Retrospective Analysis of the Impact of Meaning of Life Therapy on the Grieving Process of Cancer Patients' Family Caregivers	Qualitative design	Meaning of Life Therapy for caregivers. Helped with loss adaptation but faced challenges with silence around death.
Systematic reviews (n = 3)			
First author and year	Title	Design	Results
Harrop, 2020	The impacts and effectiveness of support for people bereaved through advanced illness: A systematic review and thematic synthesis	Systematic review and thematic synthesis	Systematic review on bereavement support. Although some studies reported improvements, the quantitative evidence was generally of low quality or mixed.

Table 1. Continued.

Systematic reviews (n = 3)			
First author and year	Title	Design	Results
Coventry, 2023	Supporting families of patients who die in adult intensive care: A scoping review of interventions	Scoping review	Scoping review of ICU family support. Psychoeducation reduced anxiety, depression, and PTSD, needing more rigorous studies.
Gillespie, 2024	Music therapy for supporting informal carers of adults with life-threatening illness pre- and post-bereavement; a mixed-methods systematic review	Systematic review	Review of music therapy for caregivers. Qualitative studies showed positive outcomes, but mixed quantitative results.

ACT, acceptance and commitment therapy; RCT, randomized controlled trial; ICU, intensive care unit; PTSD, post-traumatic stress disorder.

3.1.2 Research Design and Sample Selection

The majority of studies used randomized controlled trials (RCTs) (Davis et al., 2020; Wang et al., 2021), including a multicenter trial (Kentish-Barnes et al., 2022). Secondary analyses of data from an RCT (An et al., 2020), single-arm pilot trials (Lichtenthal et al., 2022), qualitative designs (Freitas et al., 2024) and two protocol studies (Davis et al., 2019; Prigerson et al., 2019) were also included.

All studies recruited samples in either hospital units or clinical centers (Wang et al., 2021), primarily focusing on palliative care units (Davis et al., 2019, 2020) or targeting caregivers of cancer patients in oncologic units or medical oncology centers (An et al., 2020). In contrast, some samples were obtained from ICUs (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022; Prigerson et al., 2019). The Kentish-Barnes et al. (2022) study, for instance, involved data from 34 different ICUs.

3.1.3 Inclusion and Exclusion Criteria

Eligibility criteria were primarily based on patient setting (palliative care or ICU patients) and their primary family caregivers. Most studies required participants to be adults aged 18 years old (Davis et al., 2019, 2020; Kentish-Barnes et al., 2022; Wang et al., 2021) or 21 years old (An et al., 2020; Lichtenthal et al., 2022; Prigerson et al., 2019). Language proficiency, predominantly in English, was also required (An et al., 2020; Davis et al., 2019, 2020; Lichtenthal et al., 2022; Prigerson et al., 2019; Wang et al., 2021).

Exclusion criteria included suicidal ideation (Lichtenthal et al., 2022; Prigerson et al., 2019), cognitive impairment (Freitas et al., 2024; Wang et al., 2021), psychopathology (Freitas et al., 2024), or the use of psychotropic drugs (Wang et al., 2021).

3.1.4 Representativeness

Regarding attrition in longitudinal studies, more than 75% of participants successfully completed the entire intervention in the studies conducted by An et al. (2020), Lichtenthal et al. (2022) and Wang et al. (2021). In contrast, fewer than 60% of participants completed the intervention in the study of Davis et al. (2020). Some studies offered financial compensation to participants (Lichtenthal et al., 2022; Prigerson et al., 2019).

3.1.5 Variables

Most studies assessed PGD as a key psychological outcome, using the Prolonged Grief Disorder-13 items (PG-13 scale) (An et al., 2020; Davis et al., 2019, 2020; Kentish-Barnes et al., 2022; Lichtenthal et al., 2022; Prigerson et al., 2019) and the PG-12 scale for anticipatory grief (Davis et al., 2019; Prigerson et al., 2019). Caregivers' emotional distress was often measured using the Hospital Anxiety and Depression Scale (HADS) (Davis et al., 2019, 2020; Kentish-Barnes et al., 2022), or other scales like the Self-rating Anxiety Scale (SAS) and Self-rating Depression Scale (SDS) (Wang et al., 2021). Other measures included distress tolerance (DTS), traumatic stress (IES-R), and dissociation (PDEQ) (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022).

Caregiver perceptions of the patient's quality of death and end-of-life care were assessed using instruments such as the Quality of Death Scale (An et al., 2020) and the Caregiver Evaluation of Quality of End-of-Life Care Scale (CEQUEL scale) (Prigerson et al., 2019). Emotional avoidance was measured using the Acceptance and Action Questionnaire (AAQ-II) (Davis et al., 2019) and the Brief Questionnaire on Experiential Avoidance (BEAQ) (Lichtenthal et al., 2022). Additional variables included caregivers' values (Purpose in Life Scale) and family cohesion (FACES II) (Wang et al., 2021). In ICU settings, the Family Decision-Making Self-Efficacy Scale (FDMSE) was used to evaluate caregivers' decision-making and self-efficacy (Kentish-Barnes et al., 2022). Additionally, caregivers' relationship with, or satisfaction regarding, healthcare professionals was assessed using the Human Connection Scale (An et al., 2020), the Critical Care Family Satisfaction Survey, and the Rapport Subscale of the Medical Interview Satisfaction Scale (MISS-21) (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022).

3.1.6 Confounders

Many studies did not account for disease type, except those focused on oncologic conditions (An et al., 2020; Freitas et al., 2024; Wang et al., 2021), which may have influenced results. Variability in the reasons for palliative care or ICU admission, as well as causes of death, may have acted as confounding factors (Davis et al., 2019; Kentish-Barnes et al., 2022). In addition, inclusion of both caregivers and patient-caregivers dyads across studies may have contributes to heterogeneity in outcomes (Freitas et al., 2024; Prigerson et al., 2019; Wang et al., 2021).

Moreover, intervention and follow-up periods varied across studies. Some studies included caregivers while the patient was still alive (Kentish-Barnes et al., 2022; Wang et al., 2021), whereas others enrolled participants after death (Freitas et al., 2024). Follow-up periods ranged from 1 to 6 months post-death (An et al., 2020; Kentish-Barnes et al., 2022), while other studies defined outcomes at the end of the intervention period (Lichtenthal et al., 2022; Prigerson et al., 2019).

3.2 Review Studies

3.2.1 Studies Included

Across the included review studies, a total of 72 studies on bereavement interventions for caregivers were synthesized. The number of included studies ranged from a minimum of 7 in the systematic review by Coventry et al. (2023) to a maximum of 34 in the review by Gillespie et al. (2024).

Among the three review studies included in our article, two conducted systematic reviews (Gillespie et al., 2024; Harrop et al., 2020), whereas Coventry et al. (2023) performed a scoping review. Notably, within systematic reviews, Harrop et al. (2020) also completed a thematic synthesis of the findings.

3.2.2 Search Strategy

Searches were performed using terms related to "bereavement", "end of life", and "caregivers" across multiple databases, predominantly MEDLINE, PsycINFO, and Cochrane Library. Between five and six databases were used per article. The temporal coverage ranged from 2007–2023 (Coventry et al., 2023) and extended as far back as 1990 (Harrop et al., 2020). All the studies included only English-language publications.

3.2.3 Selection and Data Extraction

Two independent reviewers screened titles and abstracts across all studies (Coventry et al., 2023; Gillespie et al., 2024; Harrop et al., 2020), using Covidence (Coventry et al., 2023) or Rayyan software (Gillespie et al., 2024) for full-text analysis. Disagreements were resolved through reviewer discussion (Harrop et al., 2020) or by consultation with a third reviewer (Coventry et al., 2023; Gillespie et al., 2024). Data extraction was conducted independently using a modified JBI tool (Gillespie et al., 2024) or ad hoc forms (Coventry et al., 2023; Harrop et al., 2020). Overall, data extraction was conducted independently in all studies, with conflicts resolved by discussion or third-party involvement (Coventry et al., 2023; Gillespie et al., 2024).

3.2.4 Inclusion and Exclusion Criteria

Eligibility criteria focused on interventions targeting caregivers of patients with end-of-life conditions (Coventry et al., 2023; Gillespie et al., 2024; Harrop et al., 2020), including those in palliative care (Harrop et al., 2020) and ICU (Coventry et al., 2023). All studies established age-based eligibility criteria for patients and caregivers, requiring participants to be at least 18 years of age (Coventry et al., 2023; Gillespie et al., 2024; Harrop et al., 2020). Some studies focused on specific intervention types, such as death preparedness interventions (Coventry et al., 2023) or music therapy interventions (Gillespie et al., 2024).

Methodological standards included publication in peer-reviewed journals (Harrop et al., 2020), the use of validated assessment instruments (Harrop et al., 2020), and RCT designs (Coventry et al., 2023) to ensure data reliability. All studies required inclusion of articles in English (Coventry et al., 2023; Gillespie et al., 2024; Harrop et al., 2020). Finally, some studies excluded articles based on country of origin (Harrop et al., 2020).

4. Main Results

4.1 Description of the Interventions

In accordance with the objective of identifying intervention programs tailored for family caregivers of end-of-life patients, the 11 studies included in the present review were categorized according to the type of intervention they propose. Within this context, 7 studies have focused on interventions targeting family caregivers of patients in palliative care units at the end of life (An et al., 2020; Davis et al., 2019, 2020; Freitas et al., 2024; Gillespie et al., 2024; Harrop et al., 2020; Wang et al., 2021), whereas four articles have focused on interventions for family caregivers involved in decision-making and accompaniment during end-of-life care in ICU (Coventry et al., 2023; Kentish-Barnes et al., 2022; Lichtenthal et al., 2022; Prigerson et al., 2019).

4.2 Palliative Care Interventions

Regarding palliative care interventions, the implemented approaches vary in setting, sample characteristics, and levels of professional involvement.

One common approach is psychological intervention conducted by mental health professionals. These interventions include not only caregivers but also caregiver-patient dyads or entire families. Several examples illustrate this approach: Wang et al. (2021) conducted Family Participatory Dignity Therapy for patient-family caregiver dyads; Freitas et al. (2024) implemented Meaning of Life Therapy, which involved the creation of a Life Letter through a shared life

review process; and Kissane et al. (2016), whose studies were included in a systematic review by Harrop et al. (2020), used Family Focused Grief Therapy (FFGT) to enhance family functioning and prevent grief complications. Conversely, some interventions have focused exclusively on primary caregivers, as reported in Harrop et al. (2020) review of interventions for bereaved caregivers of patients with cancer.

On the other hand, Harrop et al. (2020) review psychological and support group interventions led by professionals. The review includes examples of bereavement support groups (Näppä et al., 2016) as well as other group-based therapeutic approaches, such as Complicated Grief Group Therapy (Supiano et al., 2017) and Existential Behavior Therapy (Fegg et al., 2013), among others.

In addition to guided interventions, self-help interventions are included. For instance, Davis et al. (2019, 2020) describe an ACT self-help intervention for caregivers of patients in palliative care. Both articles correspond to different phases of the same trial (protocol and RCT, respectively). Similarly, Harrop et al. (2020) identified examples of self-directed individual interventions (e.g., the Finding Balance writing tool) and peer-led group interventions (e.g., online social groups).

Other intervention types included creative arts and music-based approaches (Harrop et al., 2020). Gillespie et al. (2024) conducted a systematic review focused exclusively on music-based therapy in palliative care. They observed that a greater proportion of interventions were conducted in group settings and were primarily implemented during the pre-bereavement phase. Finally, with a distinct approach, An et al. (2020) evaluated an intervention aimed at improving communication between oncologists and patients or caregivers, examining its impact on caregiver experiences of end-of-life care and bereavement outcomes.

4.3 ICU Interventions

In ICU-based interventions, two main objectives can be identified: supporting decision-making and providing psychoeducational and supportive care. Firstly, interventions focused on decision support for clinicians and families were the most common, with 4 studies identified. Coventry et al.'s (2023) systematic review included 3 studies on decision support (Curtis et al., 2016; White et al., 2018), while Prigerson et al. (2019) and Lichtenthal et al. (2022) reported different phases of the same trial (protocol versus the pilot trial). These interventions aimed to reduce families' psychological burden, including anxiety and depression (Curtis et al., 2016; Lichtenthal et al., 2022; Prigerson et al., 2019; White et al., 2018), peritraumatic and posttraumatic stress (Curtis et al., 2016; Lichtenthal et al., 2022; Prigerson et al., 2019; White et al., 2018), as well as to prevent prolonged grief and decisional regrets (Lichtenthal et al., 2022; Prigerson et al., 2019). Secondly, in providing psychoeducational and supportive care for families facing imminent death, 2 multicenter RCTs in France were identified: Lautrette et al.'s (2007) communication strategy and booklet, and Kentish-Barnes et al.'s (2022) three-step support strategy. The latter study was also included in Coventry et al.'s systematic review (2023). Additionally, Coventry et al.'s review (2023) includes studies on unidirectional information provision interventions that do not incorporate supportive or counseling components, such as Robin et al. (2021).

4.4 Caregiver Outcome Variables

4.4.1 Prolonged Grief

Many studies reported significant effects on prolonged grief. In the ICU context, RCTs have demonstrated that caregiver interventions can effectively reduce the prevalence of prolonged grief compared with a control group. This pattern is evident across both intervention types, including decision-making support interventions (Lichtenthal et al., 2022) and psychoeducational and supportive care interventions (Coventry et al., 2023; Kentish-Barnes et al., 2022; Lautrette et al., 2007). In palliative care, FFGT (Kissane et al., 2016) included in the systematic review by Harrop et al. (2020) reported a significant improvement in complicated grief symptoms. Additionally, qualitative findings from Meaning of Life Therapy (Freitas et al., 2024) indicate that Life Letters facilitate bereaved individuals' adaptation to the loss of a relative by reinforcing shared memories and maintaining a connection with the deceased. Furthermore, qualitative results from the music-based therapy review (Gillespie et al., 2024) highlight the benefits of this intervention in helping caregivers prepare for death and integrate grief into their future lives.

In contrast, other studies have reported no positive effects on caregiver bereavement following the proposed interventions. Davis et al.'s self-help intervention (2020) has been shown to reduce psychological distress, but it does not appear to facilitate grief resolution. Support groups for bereaved caregivers of patients with cancer found no effect of the interventions on bereavement outcomes (Harrop et al., 2020; Näppä et al., 2016). Similarly, An et al.'s (2020) found no association between caregiver experiences with oncologists and bereavement adjustment, despite earlier findings suggesting such a link.

4.4.2 Emotional Distress and Psychopathology

Interventions in end-of-life care have shown promising effects on family caregivers' mental health, significantly reducing anxiety and depressive symptoms (Coventry et al., 2023; Fegg et al., 2013; Harrop et al., 2020; Kentish-Barnes et al., 2022; Lautrette et al., 2007; Lichtenthal et al., 2022; Robin et al., 2021; Wang et al., 2021). Additionally, Davis et al. (2020) reported preliminary effectiveness analyses indicating at least a small reduction in psychological distress. Similarly, ICU programs have reduced traumatic symptoms in family caregivers: Lichten-

thal et al. (2022) observed immediate post-intervention improvements in peritraumatic distress, while Kentish-Barnes et al. (2022), Lautrette et al. (2007), and Robin et al. (2021) reported significant reductions in post-traumatic stress disorder (PTSD)-related symptoms. Finally, Gillespie et al. (2024) reported ambiguous findings regarding the efficacy of music-based therapy, with both significant and non-significant results. However, studies indicate that music-based therapy may reduce activity in brain structures involved in psychological processes such as anxiety and emotional distress (Fachner et al., 2013).

4.4.3 Quality of Death and End-of-Life Care

In the context of palliative care, a positive experience with the oncologist was prospectively associated with higher caregiver-rated quality of death (An et al., 2020). In contrast, no statistically significant effects were found on caregiver-rated quality of death following the three-step support strategy intervention in the ICU (Kentish-Barnes et al., 2022) or on caregiver-rated quality of end-of-life care based on the relationship with the oncologist (An et al., 2020).

4.4.4 Emotional Avoidance, Values, and Sense of Purpose

Regarding emotional avoidance, Lichtenthal et al. (2022) reported positive results, indicating that surrogates exhibited improvements in experiential avoidance following the intervention. In contrast, preliminary results from Davis et al. (2020) showed no changes in this outcome. As for caregiver values and sense of purpose, Davis et al. (2020) reported minimal effects, while An et al. (2020) found no significant effects, respectively.

4.4.5 Other Outcome Variables

Among other variables related to caregiver mental health, such as ICU experience (Kentish-Barnes et al., 2022) and decision-making self-efficacy (Lichtenthal et al., 2022), no significant effects were identified in the reviewed studies, except for decisional regret (An et al., 2020). Notably, An et al. (2020) found lower levels of decisional regret when caregivers' experiences with oncologists were more positive.

4.4.6 Patient and Family Outcome Variables

Studies including patients alongside caregivers in interventions report positive outcomes. Wang et al. (2021) found higher levels of hope and spiritual well-being in cancer patients following Dignity Therapy, while Freitas et al. (2024) noted improvements in disease adaptation and communication.

Relational benefits, such as increased family cohesion, were observed with interventions such as participatory Dignity Therapy. Freitas et al. (2024) also found Meaning of Life Therapy fostered emotional closeness and improved communication, preventing emotional silence. Gillespie et al. (2024) further confirmed that music-based therapy enhanced connection and intimacy between patients and caregivers, improving social interactions with family members.

4.4.7 Acceptance, Feasibility, Satisfaction, and Barriers

Interventions for caregivers of patients in palliative care are generally acceptable and feasible (Davis et al., 2020; Kentish-Barnes et al., 2022; Lichtenthal et al., 2022), with high levels of satisfaction observed (Freitas et al., 2024; Wang et al., 2021). Satisfaction was assessed using the Post-Intervention Satisfaction Questionnaire (PISQ) (Lichtenthal et al., 2022; Prigerson et al., 2019) or through interviews (Freitas et al., 2024). A key challenge is the recruitment of representative samples, with small sizes due to factors such as limited recruiter availability, fluctuating patient health status, caregiver bereavement, and the demanding nature of the caregiving role (Davis et al., 2020; Gillespie et al., 2024). Kentish-Barnes et al. (2022) highlight facilitators, such as low clinician time investment, simplicity, and ease of clinician training.

5. Quality Assessment Results

Quantitative studies were assessed using the "Quality Assessment Tool for Quantitative Studies" (Thomas et al., 2003). Table 2 shows scores for selection bias, study design, confounders, blinding, data collection methods, and withdrawals, ranging from 1 (strong) to 3 (weak). Davis et al. (2019), Prigerson et al. (2019) and Freitas et al. (2024) were excluded from the effectiveness evidence synthesis because they were quality studies or study protocols. Of the five studies included in the quality assessment, Davis et al. (2020) and Wang et al. (2021) scored 1, indicating strong quality and representing 40% of the studies. Kentish-Barnes et al. (2022) received a moderate score, representing 20% of the studies. Finally, An et al. (2020) and Lichtenthal et al. (2022) scored 3, indicating weak quality and representing 40% of the studies.

Regarding the review studies, all but 1 (Coventry et al., 2023) assessed the methodological quality of included studies (Gillespie et al., 2024; Harrop et al., 2020). Methods varied, and Harrop et al. (2020) used a checklist, whereas Gillespie et al. (2024) conducted independent assessments by two researchers. Similarly, Gillespie et al. (2024) applied standardized JBI critical appraisal instruments for both RCTs, quasi-experimental studies, and qualitative research. The methodological quality also varied across studies, with reviews (Gillespie et al., 2024) rating half of the included studies as good, while other assessments rated overall poor or moderate quality (Gillespie et al., 2024; Harrop et al., 2020).

6. Discussion

This study assessed the effectiveness of interventions for family caregivers of end-of-life patients, with a focus on preventing prolonged grief. It also evaluated interven-

Table 2. Quality assessment of quantitative studies.

Study	Selection bias	Study design	Confounders	Blinding	Data collection	Withdrawals and dropouts	Score
An et al. (2020)	1	2	3	3	1	1	Weak
Davis et al. (2020)	2	1	1	2	1	2	Strong
Kentish-Barnes et al. (2022)	2	1	1	3	2	2	Moderate
Wang et al. (2021)	2	1	1	2	1	1	Strong
Lichtenthal et al. (2022)	3	3	3	3	1	3	Weak

tion feasibility and methodological quality using the Effective Public Health Practice Project quality assessment tool (Thomas et al., 2003).

Given the increasing caregiving demands due to chronic illness and advances in end-of-life care, support for bereaved caregivers has become essential (Spatuzzi et al., 2022). Despite evidence of mental health risks among caregivers (Barreto-Martín et al., 2012; Martinez-Martin et al., 2008), research on effective psychological interventions remains limited and inconclusive (Candy et al., 2011; Gauthier and Gagliese, 2012; Hudson et al., 2018).

Following an extensive literature review, 11 studies meeting the inclusion criteria were selected. These articles were organized into a conceptual framework according to the intervention setting, comprising 7 articles on interventions for family caregivers of patients at the end-of-life in palliative care units (An et al., 2020; Davis et al., 2019, 2020; Freitas et al., 2024; Gillespie et al., 2024; Harrop et al., 2020; Wang et al., 2021), and 4 articles on interventions for family caregivers of patients at the end-of-life in ICU (Coventry et al., 2023; Kentish-Barnes et al., 2022; Lichtenthal et al., 2022; Prigerson et al., 2019).

Psychological approaches in palliative care included meaning-focused interventions, life review, and cognitive-behavioral therapies (Freitas et al., 2024; von Blanckenburg and Leppin, 2018). Our findings confirm that newer psychotherapeutic intervention models have been incorporated (Freitas et al., 2024), such as Dignity Therapy (Wang et al., 2021) and Meaning of Life Therapy (Freitas et al., 2024). In contrast, CBT is also present, although not as a primary focus (Lichtenthal et al., 2022; Prigerson et al., 2019). As Skivington et al. (2021) note, these models demonstrate the need for theoretically grounded interventions to improve efficacy.

When considering bereavement outcomes, it is crucial to note that encouraging results were observed, particularly concerning prolonged grief, with more promising outcomes reported in the ICU setting compared with palliative care. FFGT reduced complicated grief symptoms (Harrop et al., 2020), while Meaning of Life Therapy Life Letters (Freitas et al., 2024) and music-related therapy supported caregivers in preparing for loss (Gillespie et al., 2024). Conversely, studies by Näppä et al. (2016) reviewed in Harrop et al. (2020), as well as in Davis et al. (2020), and An et al. (2020), reported mixed or nonsignificant results. Notably, Davis et al. (2020) found no improvement in prolonged grief following a self-help ACT intervention, underscoring the need for higher-quality research. In contrast, ICU interventions were more consistently effective in reducing grief (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022), with benefits observed from both decision-making support and psychoeducational care, aligning with other ICU-focused reviews (Coventry et al., 2023). The variability in prolonged grief outcomes, particularly in palliative care, may be explained by differences in intervention intensity (self-help vs. therapist-led), timing (pre-loss vs. post-loss), clinical setting, and sample characteristics.

The majority of studies consistently showed improvements in emotional distress and psychopathology among caregivers, particularly in reducing anxiety and depression (Davis et al., 2020; Kentish-Barnes et al., 2022; Lichtenthal et al., 2022; Wang et al., 2021). Additional studies included in Coventry et al. (2023), Lautrette et al. (2007), Robin et al. (2021), Harrop et al. (2020), Fegg et al. (2013), and Gillespie et al. (2024), Fachner et al. (2013) further support these findings. Moreover, these interventions also contributed to the prevention and reduction of traumatic symptoms (Kentish-Barnes et al., 2022; Lichtenthal et al., 2022).

Caregiver-patient interventions also showed positive effects on caregivers' and patients' emotional and relational well-being (Freitas et al., 2024; Wang et al., 2021), highlighting the importance of tailored, evidence-based interventions in palliative care to effectively support both caregivers and patients (Ribera-Asensi et al., 2024). Furthermore, family-level interventions may facilitate acceptance of treatment and adherence. In particular, Wang et al. (2021) demonstrated that Family Participatory Dignity Therapy improved patient hope and spiritual well-being, reduced caregiver anxiety and depression, and enhanced family cohesion.

Overall, the direction of effects across studies suggests: (a) consistent reductions in anxiety and depression, (b) generally positive but variable effects on prolonged grief, and (c) improvements in caregiver preparedness and coping.

On the other hand, the recent recognition of PGD and the lack of unified diagnostic criteria across major classification systems pose significant challenges for research (American Psychiatric Association, 2022; World Health Organization, 2019). The DSM-5-TR requires a 12-month

period post-death duration for PGD diagnosis, whereas the ICD-11 specifies a 6-month period (Prigerson et al., 2021). The reviewed studies vary in evaluation timelines, ranging from 1 to 6 months post-death (An et al., 2020; Kentish-Barnes et al., 2022). Despite the lack of consensus, a 6-month period is most commonly used (Parro-Jiménez et al., 2021). This variability in diagnostic criteria and assessment timing complicates comparison across studies and may contribute to inconsistencies in reported effectiveness, highlighting the need for standardization.

These interventions offer a comprehensive overview of psychological support in palliative care bereavement, although the findings are limited by variability in study quality. A significant number of the studies employed RCT designs, representing the most common approach among applied studies (Davis et al., 2020; Kentish-Barnes et al., 2022; Wang et al., 2021). Given this, 62.5% of the studies analyzed received scores indicating weak methodological quality (An et al., 2020; Davis et al., 2019; Freitas et al., 2024; Lichtenthal et al., 2022; Prigerson et al., 2019), confirming the scarcity of rigorous empirical research on this topic. Only 25% of the studies demonstrated strong methodological quality, specifically the aforementioned studies by Davis et al. (2020) and Wang et al. (2021). The RCT by Kentish-Barnes et al. (2022) was the only study rated as moderate quality. The predominance of studies with weak methodological quality limits the strength of the conclusions; therefore, these findings should be interpreted with caution.

Limitations

This review has several limitations that should be considered when interpreting the findings. First, the literature search was restricted to a limited number of databases. Although the selected sources provide broad multidisciplinary coverage, the exclusion of key databases such as PubMed, Embase, and the Cochrane Library may have reduced the search comprehensiveness and increased the likelihood of missing relevant studies. Consequently, the evidence base included in this review may not fully represent all available research. The use of specific keywords may have led to the omission of articles that did not explicitly include key terms (e.g., "psychol") in the title or abstract, potentially reducing search sensitivity and resulting in the exclusion of relevant literature. Moreover, the exclusion of studies published prior to 2019 may have narrowed the scope of the evidence base, although this decision was intended to prioritize recent developments in the field. Despite the use of independent reviewers, the study selection process may have resulted in the omission of relevant studies. In addition, the focus on caregivers of end-of-life patients may limit the generalizability of the findings to other bereaved populations.

In addition, two of the five quantitative studies were rated as weak, representing a significant limitation of the evidence base. This, combined with small sample sizes (Davis et al., 2020; Freitas et al., 2024; Lichtenthal et al., 2022) and high attrition rates, likely reflecting the challenges inherent in end-of-life care contexts (Kentish-Barnes et al., 2022; Wang et al., 2021), may reduce statistical power, increase the risk of bias, and contribute to an overestimation of intervention effects. Furthermore, short follow-up periods limit the ability to draw conclusions regarding the sustainability of intervention benefits over time (Kentish-Barnes et al., 2022; Wang et al., 2021).

Generalizability of the findings is also constrained by the relative racial and ethnic homogeneity of study samples (An et al., 2020; Lichtenthal et al., 2022). In addition, substantial heterogeneity across studies in intervention types, outcome measures, and assessment timepoints complicates direct comparisons and limits the ability to draw definitive conclusions. Taken together, these limitations reduce the overall certainty of the evidence and underscore the need for cautious interpretation of the findings, particularly regarding the effectiveness of psychological interventions. Finally, the review protocol was not prospectively registered in PROSPERO, as it was developed retrospectively.

7. Conclusions

In conclusion, this review emphasizes the role of psychological interventions in alleviating prolonged grief and mental health challenges among end-of-life caregivers. The findings indicate promising outcomes, particularly for theoretically based approaches, in reducing emotional distress, anxiety, and depression, as well as in fostering relational well-being for caregivers and patients. However, the predominance of methodologically weak studies limits the strength of these conclusions.

It is important to acknowledge the substantial heterogeneity observed across the included studies, which varied widely in intervention type, clinical setting, target outcomes, and methodological design. Rather than limiting the interpretability, this diversity reflects the complexity of bereavement experiences and the absence of a unified intervention framework for caregivers of patients at end-of-life. Variability in approaches underscores the need for flexible, context-sensitive interventions and supports the relevance of theoretically grounded models tailored to distinct caregiving trajectories and care environments. By systematically organizing and comparing these interventions, the present review provides a comprehensive overview of the field, identifies consistent patterns of effectiveness despite heterogeneity, and highlights critical gaps that must be addressed to advance research and clinical practice.

However, study limitations underscore the need for more robust, large-scale RCTs to establish a stronger evidence base. Variability in PGD diagnostic criteria and sample diversity further limits generalizability. Future research should prioritize standardization of diagnostic criteria and outcome measures, implementation of multicenter trials,

extension of follow-up periods, and inclusion of more diverse samples, as well as the development of tailored interventions for distinct caregiving contexts. Continued development and evaluation of interventions supporting family caregivers in end-of-life care and bereavement are essential to improve end-of-life care quality and bereavement outcomes.

Availability of Data and Materials

All data analyzed in this study were obtained from previously published studies and are available in the cited articles. No new datasets were generated.

Author Contributions

OR-A: formal analysis, writing—original draft, writing—review & editing; MP-M: conceptualization, data curation, supervision, writing—review & editing; SV-M: methodology, formal analysis, writing—original draft and writing—review & editing. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

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Conflicts of Interest

The authors declare no conflicts of interest.

Supplementary Material

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References

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR). American Psychiatric Association Publishing: Washington, DC. 2022. https://doi.org/10.1176/appi.books.9780890425787

An AW, Ladwig S, Epstein RM, Prigerson HG, Duberstein PR. The impact of the caregiver-oncologist relationship on caregiver experiences of end-of-life care and bereavement outcomes. Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer. 2020; 28: 4219–4225. https://doi.org/10.1007/s00520-019-05185-2

Barreto-Martín P, Pérez-Marín M, Yi P. Predictors in complicated grief: Supporting families in palliative care dealing with grief. In Chang E, Johnson A (eds.) Contemporary and Innovative Practice in Palliative Care (pp. 59–82). IntechOpen: Rijeka, Croatia. https://doi.org/10.5772/30873

Buckley T, Spinaze M, Bartrop R, McKinley S, Whitfield V, Havyatt J, et al. The nature of death, coping response and intensity of bereavement following death in the critical care environment. Australian Critical Care: Official Journal of the Confederation of Australian Critical Care Nurses. 2015; 28: 64–70. https://doi.org/10.1016/j.aucc.2015.02.003

Candy B, Jones L, Drake R, Leurent B, King M. Interventions for supporting informal caregivers of patients in the terminal phase of a disease. The Cochrane Database of Systematic Reviews. 2011; 2011: CD007617. https://doi.org/10.1002/14651858.CD007617.pub2

Coelho A, Albuquerque S, Neto DD. Bereavement support guidelines for caregivers in palliative care: a scoping review. Frontiers in Psychology. 2025; 16: 1541783. https://doi.org/10.3389/fpsyg.2025.1541783

Coventry A, Gerdtz M, McInnes E, Dickson J, Hudson P. Supporting families of patients who die in adult intensive care: A scoping review of interventions. Intensive and Critical Care Nursing. 2023; 78: 103454. https://doi.org/10.1016/j.iccn.2023.103454

Currier JM, Holland JM, Neimeyer RA. Do CBT-Based Interventions Alleviate Distress Following Bereavement? A Review of the Current Evidence. International Journal of Cognitive Therapy. 2010; 3: 77–93. https://doi.org/10.1521/ijct.2010.3.1.77

Curtis JR, Treece PD, Nielsen EL, Gold J, Ciechanowski PS, Shannon SE, et al. Randomized Trial of Communication Facilitators to Reduce Family Distress and Intensity of End-of-Life Care. American Journal of Respiratory and Critical Care Medicine. 2016; 193: 154–162. https://doi.org/10.1164/rccm.201505-0900OC

Davis EL, Deane FP, Lyons GC. An acceptance and commitment therapy self-help intervention for carers of patients in palliative care: Protocol of a feasibility randomised controlled trial. Journal of Health Psychology. 2019; 24: 685–704. https://doi.org/10.1177/1359105316679724

Davis EL, Deane FP, Lyons GC, Barclay GD, Bourne J, Connolly V. Feasibility randomised controlled trial of a self-help acceptance and commitment therapy intervention for grief and psychological distress in carers of palliative care patients. Journal of Health Psychology. 2020; 25: 322–339. https://doi.org/10.1177/1359105317715091

Eisma MC, Stroebe MS. Emotion Regulatory Strategies in Complicated Grief: A Systematic Review. Behavior Therapy. 2021; 52: 234–249. https://doi.org/10.1016/j.beth.2020.04.004

Fachner J, Gold C, Erkkilä J. Music Therapy Modulates Fronto-Temporal Activity in Rest-EEG in Depressed Clients. Brain Topography. 2013; 26: 338–354. https://doi.org/10.1007/s10548-012-0254-x

Fegg MJ, Brandstätter M, Kögler M, Hauke G, Rechenberg-

Winter P, Fensterer V, et al. Existential behavioural therapy for informal caregivers of palliative patients: a randomised controlled trial. Psycho-oncology. 2013; 22: 2079–2086. https://doi.org/10.1002/pon.3260

Foran S, Rukh M, Knapp A, O'Brien JM, Brons C, Glessman J, et al. Bereavement interventions for families in the ICU: a scoping review informed by a core outcome set. Annals of Intensive Care. 2025; 15: 146. https://doi.org/10.1186/s13613-025-01557-6

Freitas MJ, Remondes-Costa S, Veiga E, Macedo G, Teixeira RJ, Leite M. Life beyond Loss: A Retrospective Analysis of the Impact of Meaning of Life Therapy on the Grieving Process of Cancer Patients' Family Caregivers. Healthcare (Basel, Switzerland). 2024; 12: 471. https://doi.org/10.3390/healthcare12040471

Gauthier LR, Gagliese L. Bereavement interventions, end-of-life cancer care, and spousal well-being: A systematic review. Clinical Psychology: Science and Practice. 2012; 19: 72–92. https://doi.org/10.1111/j.1468-2850.2012.01275.x

Gillespie K, McConnell T, Roulston A, Potvin N, Ghiglieri C, Gadde I, et al. Music therapy for supporting informal carers of adults with life-threatening illness pre- and post-bereavement; a mixed-methods systematic review. BMC Palliative Care. 2024; 23: 55. https://doi.org/10.1186/s12904-024-01364-z

Harrop E, Morgan F, Longo M, Semedo L, Fitzgibbon J, Pickett S, et al. The impacts and effectiveness of support for people bereaved through advanced illness: A systematic review and thematic synthesis. Palliative Medicine. 2020; 34: 871–888. https://doi.org/10.1177/0269216320920533

Hudson P, Hall C, Boughey A, Roulston A. Bereavement support standards and bereavement care pathway for quality palliative care. Palliative and Supportive Care. 2018; 16: 375–387. https://doi.org/10.1017/s1478951517000451

Kentish-Barnes N, Chevret S, Valade S, Jaber S, Kerhuel L, Guisset O, et al. A three-step support strategy for relatives of patients dying in the intensive care unit: a cluster randomised trial. Lancet (London, England). 2022; 399: 656–664. https://doi.org/10.1016/S0140-6736(21)02176-0

Kissane DW, Zaider TI, Li Y, Hichenberg S, Schuler T, Lederberg M, et al. Randomized Controlled Trial of Family Therapy in Advanced Cancer Continued Into Bereavement. Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology. 2016; 34: 1921–1927. https://doi.org/10.1200/JCO.2015.63.0582

Kustanti CY, Fang H, Linda Kang X, Chiou J, Wu S, Yunitri N, et al. The Effectiveness of Bereavement Support for Adult Family Caregivers in Palliative Care: A Meta-Analysis of Randomized Controlled Trials. Journal of Nursing Scholarship. 2021; 53: 208–217. https://doi.org/10.1111/jnu.12630

Lautrette A, Darmon M, Megarbane B, Joly LM, Chevret S, Adrie C, et al. A Communication Strategy and Brochure for Relatives of Patients Dying in the ICU. New England Journal of Medicine. 2007; 356: 469–478. https://doi.org/10.1056/nejmoa063446

Lichtenthal WG, Viola M, Rogers M, Roberts KE, Lief L, Cox CE, et al. Development and preliminary evaluation of EMPOWER for surrogate decision-makers of critically ill patients. Palliative & Supportive Care. 2022; 20: 167–177. https://doi.org/10.1017/S1478951521000626

Martinez-Martin P, Arroyo S, Rojo-Abuin JM, Rodriguez-Blazquez C, Frades B, de Pedro Cuesta J, et al. Burden, perceived health status, and mood among caregivers of Parkinson's disease patients. Movement Disorders: Official Journal of the Movement Disorder Society. 2008; 23: 1673–1680. https://doi.org/10.1002/mds.22106

Nelson JE, Puntillo KA, Pronovost PJ, Walker AS, McAdam JL, Ilaoa D, et al. In their own words: patients and families define high-quality palliative care in the intensive care unit. Critical Care Medicine. 2010; 38: 808–818. https://doi.org/10.1097/ccm.0b013e3181c5887c

Näppä U, Lundgren AB, Axelsson B. The effect of bereavement groups on grief, anxiety, and depression - a controlled, prospective intervention study. BMC Palliative Care. 2016; 15: 58. https://doi.org/10.1186/s12904-016-0129-0

Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ (Clinical Research Ed.). 2021; 372: n71. https://doi.org/10.1136/bmj.n71

Parro-Jiménez E, Morán N, Gesteira C, Sanz J, García-Vera MP. Complicated grief: A systematic review of the prevalence, diagnosis, risk and protective factors in the adult population of Spain. Anales de Psicología. 2021; 37: 189–201. https://doi.org/10.6018/analesps.443271

Prigerson HG, Boelen PA, Xu J, Smith KV, Maciejewski PK. Validation of the new DSM-5-TR criteria for prolonged grief disorder and the PG-13-Revised (PG-13-R) scale. World Psychiatry: Official Journal of the World Psychiatric Association (WPA). 2021; 20: 96–106. https://doi.org/10.1002/wps.20823

Prigerson HG, Viola M, Brewin CR, Cox C, Ouyang D, Rogers M, et al. Enhancing & Mobilizing the POtential for Wellness & Emotional Resilience (EMPOWER) among Surrogate Decision-Makers of ICU Patients: study protocol for a randomized controlled trial. Trials. 2019; 20: 408. https://doi.org/10.1186/s13063-019-3515-0

Rezaei M, Keyvanloo Shahrestanaki S, Sheikh Milani A, Neishabouri M, Khaleghparast S, Rajabi MR. Evaluation of outcomes of psychological interventions in terminally ill family caregivers: a brief overview. Oncology Reviews. 2024; 18: 1482195. https://doi.org/10.3389/or.2024.1482195

Ribera-Asensi O, Pérez-Marín M, Valero-Moreno S. Family bonds and personal factors in caregiver burden in patients at the end of life. Family Process. 2024; 63: 2547–2562. https://doi.org/10.1111/famp.13026

Robin S, Labarriere C, Sechaud G, Dessertaine G, Bosson JL, Payen JF. Information Pamphlet Given to Relatives During the End-of-Life Decision in the ICU: An Assessor-Blinded, Randomized Controlled Trial. Chest. 2021; 159: 2301–2308. https://doi.org/10.1016/j.chest.2021.01.072

Skivington K, Matthews L, Simpson SA, Craig P, Baird J, Blazeby JM, et al. A new framework for developing and eval-

uating complex interventions: update of Medical Research Council guidance. BMJ (Clinical Research Ed.). 2021; 374: n2061. https://doi.org/10.1136/bmj.n2061

Spatuzzi R, Vespa A, Fabbietti P, Ricciuti M, Rosati G, Guariniello L, et al. Elderly Helping Other Elderly: A Comparative Study of Family Caregiver Burden Between Patients With Dementia or Cancer at the End of Life. Journal of Social Work in End-of-life & Palliative Care. 2022; 18: 96–108. https://doi.org/10.1080/15524256.2022.2042459

Supiano KP, Haynes LB, Pond V. The Process of Change in Complicated Grief Group Therapy for Bereaved Dementia Caregivers: An Evaluation Using the Meaning of Loss Codebook. Journal of Gerontological Social Work. 2017; 60: 155–169. https://doi.org/10.1080/01634372.2016.1274930

Thomas H, Ciliska D, Dobbins M, Micucci S. Quality assessment tool for quantitative studies. Effective Public Health Practice Project: Hamilton, Ontario. 2003.

Trevino KM, Prigerson HG, Shen MJ, Tancredi DJ, Xing G, Hoerger M, et al. Association between advanced cancer patient-caregiver agreement regarding prognosis and hospice enrollment. Cancer. 2019; 125: 3259–3265. https://doi.org/10.1002/cncr.32188

von Blanckenburg P, Leppin N. Psychological interventions in palliative care. Current Opinion in Psychiatry. 2018; 31: 389–395. https://doi.org/10.1097/yco.0000000000000441

Wagner B, Rosenberg N, Hofmann L, Maass U. Web-Based Bereavement Care: A Systematic Review and Meta-Analysis. Frontiers in Psychiatry. 2020; 11: 525. https://doi.org/10.3389/fpsyt.2020.00525

Wang C, Chen J, Wang Y, Xu W, Xie M, Wu Y, et al. Effects of family participatory dignity therapy on the psychological well-being and family function of patients with haematologic malignancies and their family caregivers: A randomised controlled trial. International Journal of Nursing Studies. 2021; 118: 103922. https://doi.org/10.1016/j.ijnurstu.2021.103922

White DB, Angus DC, Shields AM, Buddadhumaruk P, Pidro C, Paner C, et al. A Randomized Trial of a Family-Support Intervention in Intensive Care Units. The New England Journal of Medicine. 2018; 378: 2365–2375. https://doi.org/10.1056/NEJMoa1802637

World Health Organization. International Classification of Diseases, Eleventh Revision (ICD-11). 2019. Available at: https://icd.who.int/browse11 (Accessed: 5 April 2026).