

REVIEW

Evaluating the effectiveness of selected existential therapies for death anxiety in advanced cancer: a systematic review and meta-analysis

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Abstract

Aim: To evaluate the effectiveness of selected existential therapies, including Dignity Therapy (DT), Meaning-Centered Psychotherapy (MCP), Logotherapy, and Reminiscence Therapy (RT), in reducing death anxiety among adults with advanced cancer. **Design:** A systematic review and meta-analysis of randomized controlled trials (RCTs). **Methods:** A comprehensive search of PubMed, ProQuest, and EBSCO databases was conducted for RCTs published between 2018 and July 2025. Eligible studies included adult cancer patients receiving any of the four existential therapies. Data extraction and quality assessment were performed independently by two reviewers. Pooled effect sizes were calculated using a random-effects model, and subgroup analyses were conducted by therapeutic modality. **Results:** Nine RCTs involving 821 participants met the inclusion criteria. The pooled overall effect of existential therapies on death anxiety was small and not statistically significant. Subgroup analysis, however, demonstrated that dignity therapy significantly reduced death anxiety compared with control conditions. Other existential therapies showed modest but inconsistent effects. **Conclusion:** While existential therapies offer limited overall benefit for reducing death anxiety in advanced cancer, dignity therapy appears to be the most effective intervention. Further research employing comparative designs, more extended follow-up periods, and culturally adapted approaches is recommended to optimize psychosocial care for terminally ill patients.

Keywords: advanced cancer, death anxiety, dignity therapy, existential therapy, logotherapy, meaning-centered psychotherapy, palliative care, reminiscence therapy.

Introduction

A cancer diagnosis often triggers more than physical decline; it disrupts a person's identity, sense of control, and existential security. Psychological distress, such as death anxiety, existential loneliness, and a loss of meaning, is frequently experienced in advanced stages of illness. Although these concerns are common, they are often insufficiently addressed by standard biomedical approaches. Emerging evidence suggests that existential and spiritual well-being significantly affect not only psychological resilience but also quality of life and care outcomes (Breitbart et al., 2015; Philipp et al., 2025).

In response, existential psychotherapies have gained growing attention in psycho-oncology. Interventions such as Dignity Therapy (DT), Meaning-Centered

Psychotherapy (MCP), Reminiscence Therapy (RT), and Logotherapy are designed to support identity, meaning, and emotional coherence for patients with life-limiting illness. Unlike conventional psychotherapies that primarily focus on symptom control, these interventions encourage patients to reflect on their life purpose, values, and legacy (Grossman et al., 2018; Lehto & Negarandeh, 2024; Rosenfeld et al., 2018).

DT is a brief, structured intervention designed to help individuals nearing the end of life affirm their dignity by recalling and reflecting on meaningful life experiences. It has been associated with reductions in depression, anxiety, and hopelessness. A remote version (r-DT) has demonstrated similar outcomes in patients with hematologic malignancies and has also improved the emotional well-being of their family members (Hong et al., 2022; Xie et al., 2024). Meaning-Centered Psychotherapy (MCP), rooted in Viktor Frankl's logotherapy, facilitates the exploration of meaning even in the face of suffering. Clinical trials have shown its effectiveness in improving spiritual well-being

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and reducing depression, hopelessness, and the desire for hastened death (Amini et al., 2020; Breitbart et al., 2015; Philipp et al., 2021). Mediating factors such as peace and meaning appear central to its therapeutic impact (Mahdavi et al., 2019; Rosenfeld et al., 2018).

RT, initially developed for geriatric care, has been increasingly adapted for cancer populations with encouraging results. By revisiting meaningful life events, RT helps patients construct a coherent sense of identity. Virtual and telephone-based RT formats have also demonstrated effectiveness in reducing anxiety and depression while enhancing quality of life (An et al., 2018; Babaei et al., 2024). Despite promising evidence, integration of these therapies into standard cancer care remains limited, constrained by time, training, and clinical awareness (Berlin & von Blanckenburg, 2022; Dong et al., 2019; Walbaum et al., 2024).

Although these therapies share a common existential foundation, their effectiveness specifically in reducing death anxiety has not been consistently or comprehensively synthesized. Existing studies vary in methodology, cancer type, disease stage, therapeutic format, and measured outcomes. Moreover, no review to date has systematically compared major existential therapies, including DT, MCP, Logotherapy, and RT, with a specific focus on death anxiety, despite its clinical importance in advanced cancer care.

Aim

Therefore, this review aims to evaluate the effectiveness of selected existential therapies – Dignity Therapy (DT), Meaning-Centered Psychotherapy (MCP), logotherapy, and Reminiscence Therapy (RT) – in reducing death anxiety among adults with advanced cancer. By synthesizing the current evidence, this review seeks to clarify therapeutic benefits and identify gaps in the research on integrating existential care into oncology settings.

Methods

Design

This systematic review and meta-analysis were registered in PROSPERO (Registration ID: CRD420251120615).

Eligibility criteria

The eligibility criteria for this review focused on studies involving adult patients aged 18 years and older who were diagnosed with advanced cancer. Only studies that evaluated existential therapy

interventions, specifically Dignity Therapy (DT), Meaning-Centered Psychotherapy (MCP), Logotherapy, or Reminiscence Therapy (RT), were included. To be eligible, studies were required to report death anxiety as an outcome using validated measurement instruments and employ a quantitative research design, such as randomized controlled trials, quasi-experimental studies, or pre-post intervention designs. Eligible articles also needed to be published in peer-reviewed journals and written in English.

Studies were excluded if they involved pediatric populations, non-cancer patients, or individuals without advanced-stage cancer. Qualitative studies, reviews, theoretical papers, conference abstracts, and study protocols were also excluded. Additionally, studies that did not assess death anxiety or lacked sufficient data for calculating effect sizes were not considered for inclusion.

Search strategy

A comprehensive search of PubMed, ProQuest, and EBSCO databases was conducted for randomized controlled trials (RCTs) published between 2018 and July 2025. The search strategy combined controlled vocabulary and free-text terms using the following Boolean operators: (“Neoplasms” OR cancer OR “advanced cancer” OR “terminal cancer”) AND (“death anxiety” OR “death-related anxiety”) AND (“existential therapy” OR “existential psychotherapy” OR “meaning-centered therapy” OR “dignity therapy” OR logotherapy). Searches were limited to English-language, peer-reviewed original studies involving adult human participants. Duplicate records were removed, and titles and abstracts were screened, followed by full-text review of eligible articles.

Study selection inc. PRISMA flow diagram

A total of 1,930 records were identified through database searches and manual searching. After removing duplicates and automated exclusions, 31 records remained for screening. Of these, 17 full texts were sought, and 13 were successfully retrieved for eligibility assessment. Four articles were excluded for failing to meet the criteria, leaving nine studies included in the final review. The whole selection process is presented in the PRISMA flow diagram (Figure 1).

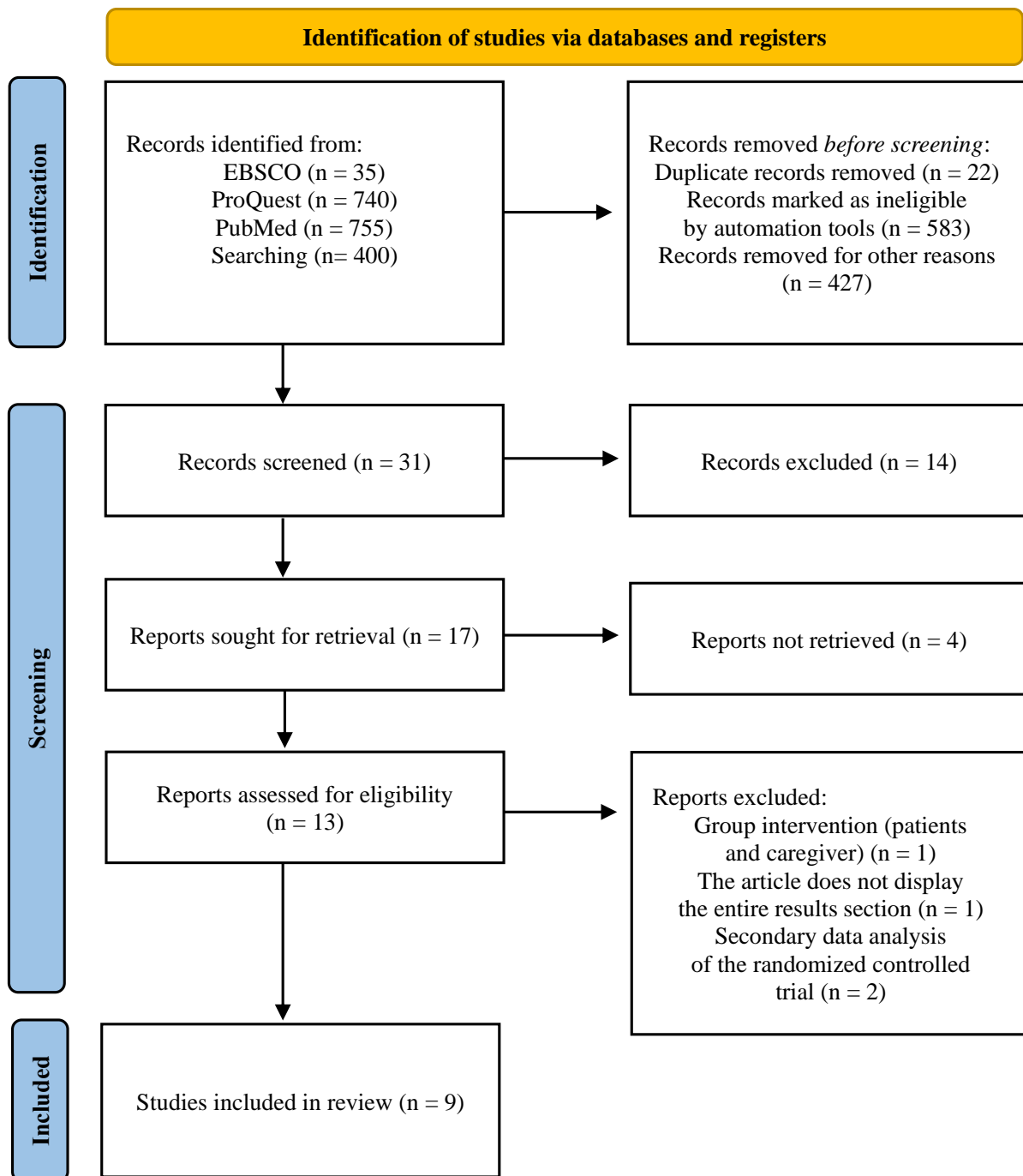


Figure 1 Flow Diagram Research Procedure (Moher et al., 2021)

Evaluation of quality of articles

Data extraction and quality assessment were performed independently by two reviewers. The methodological rigor of the included randomized controlled trials was evaluated using the Jadad Scale, which examines the adequacy of randomization, blinding procedures, and the reporting of withdrawals or dropouts. Each study was assigned a score ranging from 0 to 5, with higher scores indicating greater

methodological robustness. Trials scoring ≥ 3 were considered to have sufficient internal validity and included in the quantitative synthesis, whereas studies with lower scores were excluded due to methodological shortcomings. This structured assessment process was applied to reduce bias and ensure the inclusion of reliable evidence.

Data extraction

A structured data extraction process was implemented to ensure consistency and accuracy across all included studies. Two independent reviewers systematically retrieved relevant information using a standardized extraction form. Discrepancies were resolved through discussion or consultation with a third reviewer to maintain objectivity and reduce potential bias.

Key data elements extracted from each study included: study identifiers (first author, year of publication, country), participant characteristics (sample size, age range, cancer type, and stage), intervention details (type of existential therapy, duration, delivery format), comparator characteristics (if applicable), outcome measures related to death anxiety (e.g., Templer Death Anxiety Scale, Collett-Lester Fear of Death Scale), quantitative findings (means, standard deviations, effect sizes), and study quality indicators, including Jadad scores.

All extracted data were verified for accuracy and entered into Review Manager version 5.3 for meta-analytic processing. Summary effect sizes were computed using standardized mean differences, and a random-effects model was applied to account for variability across studies. Statistical heterogeneity was assessed using the I^2 statistic, providing a measure of inconsistency among the included studies. This rigorous approach ensured that the synthesized findings were derived from reliable, methodologically sound evidence.

Results

A total of 1,211 articles were screened by title, followed by abstract review and full-text assessment. Irrelevant articles were excluded. Study selection resulted in nine studies examining existential therapy for reducing death anxiety in adults with cancer (Table 1). Based on the systematic review, seven randomized controlled trials (RCTs) were included in the meta-analysis. The primary variable of interest was existential therapy, defined as structured psychological interventions – such as Dignity Therapy, Meaning-Centered Psychotherapy, Reminiscence Therapy, and logotherapy – aimed at reducing death anxiety in patients with cancer.

A total of nine studies, encompassing 821 participants (417 in intervention groups and 404 in control groups), were included in the meta-analysis to evaluate the efficacy of existential therapies in alleviating psychological distress among individuals with advanced cancer. The interventions were categorized into four types: Dignity Therapy (DT), Managing Cancer and Living

Meaningfully (CALM), Reminiscence Therapy (RT), and Logotherapy.

The overall meta-analysis (Figure 2) showed a small but statistically significant effect favoring existential therapy interventions over control conditions (SMD = -0.20; 95% CI: -0.34 to -0.06; $p = 0.006$), with negative SMD values indicating reduced psychological distress. Nonetheless, heterogeneity was substantial ($\chi^2 = 51.60$, $df = 8$, $p < 0.00001$; $I^2 = 84\%$), limiting confidence in the pooled estimate and suggesting considerable differences across studies in populations, intervention formats, or measurement tools.

Dignity Therapy (DT) demonstrated the largest effect size (SMD = 0.84; 95% CI: 0.42 to 1.26; $p < 0.0001$). The positive SMD reflects the scoring direction of the included outcome measures rather than increased distress; however, the exceptionally high heterogeneity ($I^2 = 92\%$) indicates notable variability among studies.

CALM showed a small, non-significant effect favoring the control group (SMD = -0.28; 95% CI: -0.60 to 0.03; $p = 0.08$) with no heterogeneity ($I^2 = 0\%$), suggesting consistent findings across included trials. Reminiscence Therapy (RT) produced a moderate, statistically significant reduction in distress (SMD = -0.29; 95% CI: -0.47 to -0.12; $p = 0.001$), although heterogeneity remained substantial ($I^2 = 79\%$).

Logotherapy, represented by a single study, showed a significant effect (SMD = -0.75; 95% CI: -1.28 to -0.22; $p = 0.005$), but this finding should be interpreted with caution given its reliance on a single dataset, limiting stability and generalizability.

Consistent with the variability across intervention types, the test for subgroup differences revealed significant heterogeneity ($\chi^2 = 16.54$, $df = 3$, $p = 0.0009$; $I^2 = 81.9\%$), indicating that the four modalities differ meaningfully in their effectiveness. Overall, DT had the most significant impact, whereas CALM showed the least measurable benefit.

The funnel plot (Figure 3) was inspected to evaluate potential publication bias. The distribution of studies appeared broadly symmetrical around the pooled effect size, with most data points falling within the pseudo 95% confidence intervals. Although a slight leftward asymmetry was noted, possibly reflecting a tendency toward publishing favorable results, no significant gaps or clustering suggestive of missing studies were observed. The spread across different intervention types (DT, CALM, RT, Logotherapy) further supports balanced representation.

Table 1 Systematic Review of Existential Therapy for Death Anxiety in Advanced Cancer (Part 1)

First Author, Year	Type of cancer	Type of Existential Therapy	Comparison	Effect size	JADAD Score
Seiler et al., 2024	Lung (21%), gynecological (12%), gastrointestinal (12%), skin (12%), among others.	Dignity Therapy (DT) and DT+ (with family caregiver involvement), a structured, brief, dignity-promoting intervention focusing on meaning and legacy creation.	Standard palliative care.	Case: 28, Mean \pm SD 8.29 \pm 4.23, $p = 0.59$ (-1.03–0.60) Control: 14, Mean \pm SD 8.36 \pm 4.81, $p = 0.09$ (-0.36–4.79)	4 / 5
Zhang et al., 2024	Metastatic breast cancer patients in China.	CALM (Managing Cancer and Living Meaningfully) – a brief, manualized existential psychotherapy focusing on death, meaning, identity, and future.	Waitlist Control (WLC) group receiving usual care. Participants in WLC received CALM only after all assessments were completed.	Case: 19, Mean \pm SD 26.74 \pm 17.672, $p = 0.228$ (-1.087–0.301) Control: 17, Mean \pm SD. 32.25 \pm 19.814, $p = 0.102$ (-1.113–-0.234)	3 / 5
Liang & Zhang, 2024	Unresectable, metastatic gastrointestinal cancers, including gastric and colorectal cancer.	Reminiscence Therapy (RT): 12-session, group-based therapy (90 minutes / session), sessions encouraged storytelling around life themes and identity.	Usual care only: education, follow-up, FAQs, and general supportive care.	Case: 112, Mean \pm SD 7.0 \pm 2.5, $p = 0.005^*$ Control: 110, Mean \pm SD 7.4 \pm 2.5, $p = 0.255$	4 / 5
Chen et al., 2021	Hematologic neoplasms, including leukemia, lymphoma, multiple myeloma, and myelodysplastic syndrome.	Dignity Therapy (DT), based on Chochinov’s model: structured life review involving guided questions, audio-recording, transcript, and e-product creation.	Standard care only: routine symptom management, health education, and basic psychological support without existential components.	Case: 32, Mean \pm SD 40.23 \pm 8.69, $p < 0.001^*$ Control: 34, Mean \pm SD 28.97 \pm 6.45, $p < 0.001^*$	4 / 5
Babaei et al., 2024	Gastric cancer (patients undergoing chemotherapy).	Virtual Reminiscence Therapy – 6 weekly telephone-based sessions (30 minutes each) led by a psychiatric nurse, focused on recalling positive, meaningful life events.	Routine post-chemotherapy care only (no psychological intervention).	Case: 68, Mean \pm SD 35.32 \pm 6.5, $p < 0.001^*$ Control: 70, Mean \pm SD 41.82 \pm 10.1, $p < 0.001^*$	4 / 5

DT – Dignity Therapy; CALM – Managing Cancer and Living Meaningfully; WLC – Waitlist Control; RT – Reminiscence Therapy; NSCLC – Non-Small Cell Lung Cancer; SCLC – Small Cell Lung Cancer; MCGP – Meaning-Centered Group Psychotherapy; IMCP-PC – Individual Meaning-Centered Psychotherapy for Palliative Care; LRT-MST – Life Review Therapy with Memory Specificity Training; CAU – Care-as-usual; SD – Standard deviation; * $p < 0.05$

Table 1 Systematic Review of Existential Therapy for Death Anxiety in Advanced Cancer (Part 2)

First Author, Year	Type of cancer	Type of Existential Therapy	Comparison	Effect size	JADAD Score
Guo et al., 2022	Elderly lung cancer patients (≥ 60 years old) post-surgery, including NSCLC and SCLC subtypes.	Reminiscence Therapy (RT) delivered in structured group sessions every 2 weeks for 12 months. Sessions encouraged memory sharing across 12 life-history themes with family involvement.	Usual care only: routine post-discharge health education and general follow-up by nurses, without structured psychotherapy.	Case: 69, Mean \pm SD 7.6 ± 2.6 , $p = 0.026^*$ Control: 69, Mean \pm SD 7.8 ± 2.4 , $p = 0.685$	4 / 5
Fraguell-Hernando et al., 2020	Advanced-stage cancer, various types including lung, gynecological, colorectal, and others.	Individual Meaning-Centered Psychotherapy for Palliative Care (IMCP-PC) – a 3-session, individualized, home-delivered existential therapy adapted from MCGP.	Counseling-based supportive psychotherapy, focused on emotion validation and illness-related concerns.	Case: 16, Mean \pm SD 6.53 ± 2.949 , $p = 0.017^*$ (0.743–4.74) Control: 16, Mean \pm SD 8.56 ± 3.983 , $p = 0.094$ (-2.23–4.72) Control: 30 Mean \pm SD 9.76 ± 2.64 , $p = 0.011^*$	4 / 5
Kleijn et al., 2018	Mixed types of advanced-stage cancer (lung, hematologic, breast, head & neck, and others); all participants were receiving palliative care.	Life Review Therapy with Memory Specificity Training (LRT-MST) – a structured 4-session home-based intervention (“Dear Memories”), focused on retrieving meaningful, positive memories.	Care-as-usual (CAU): medical visits with emotional support if needed; after follow-up, LRT-MST was offered to this group.	Case: 44, Mean \pm SD 4.6 ± 3.8 , $p = 0.44$ Control: 47, Mean \pm SD 5.3 ± 3.9 , $p = 0.44$	4 / 5
Faraji Emafti et al., 2019	Mixed cancer types, but most prevalent was breast cancer (33.9%), followed by gastrointestinal cancers (e.g., stomach, intestine, esophagus).	Group Logotherapy, based on Viktor Frankl’s approach, centered on finding meaning in life – even in suffering, and attitudinal values across 10 sessions over 5 weeks.	Routine care only (control group).	Case: 29, Mean \pm SD 7.14 ± 4.12 , $p = 0.005^*$ Control: 30, Mean \pm SD 9.76 ± 2.64 , $p = 0.011^*$	3 / 5

DT – Dignity Therapy; CALM – Managing Cancer and Living Meaningfully; WLC – Waitlist Control; RT – Reminiscence Therapy; NSCLC – Non-Small Cell Lung Cancer; SCLC – Small Cell Lung Cancer; MCGP – Meaning-Centered Group Psychotherapy; IMCP-PC – Individual Meaning-Centered Psychotherapy for Palliative Care; LRT-MST – Life Review Therapy with Memory Specificity Training; CAU – Care-as-usual; SD – Standard deviation; $*p < 0.05$

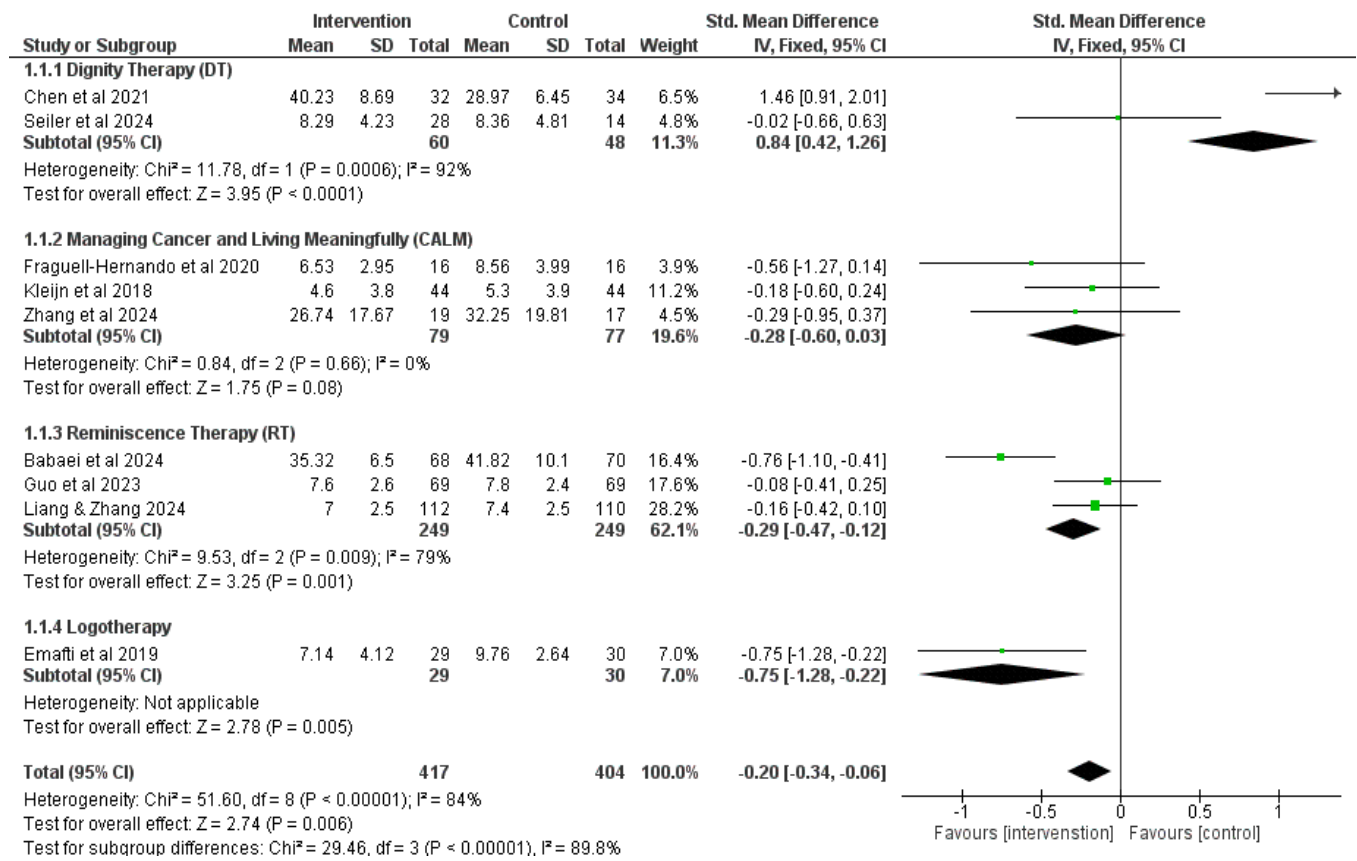


Figure 2 Forest Plots on Existential Therapy for Death Anxiety in Advanced Cancer (Babaei et al., 2024; Chen et al., 2021; Faraji Emafi et al., 2019; Fraguell-Hernando et al., 2020; Guo et al., 2022; Kleijn et al., 2018; Liang & Zhang, 2024; Seiler et al., 2024; Zhang et al., 2024)

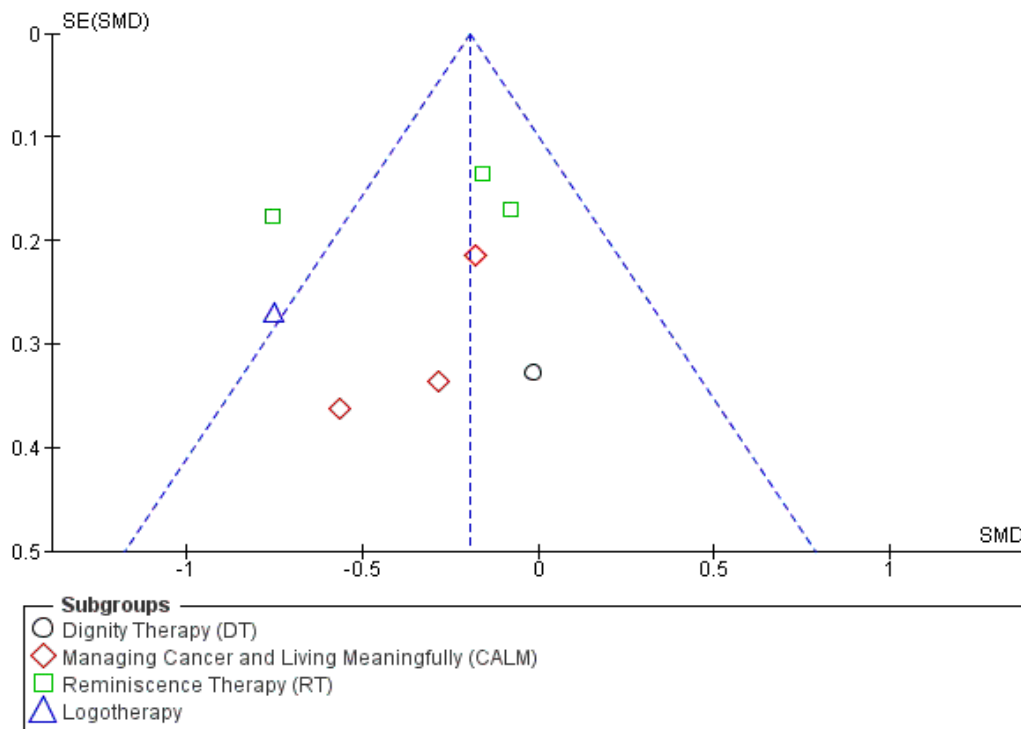


Figure 3 Funnel Plots on Existential Therapy for Death Anxiety in Advanced Cancer

Discussion

The findings provide evidence supporting the efficacy of dignity-conserving psychotherapeutic interventions – particularly Dignity Therapy (DT), Reminiscence Therapy (RT), and meaning-centered approaches – in mitigating psychological distress and improving quality of life among patients with advanced cancer. The pooled effect sizes from the forest plot demonstrate a statistically significant reduction in anxiety and depression across studies, corroborating prior findings and reinforcing the therapeutic relevance of such interventions in palliative care settings.

The findings align with previous randomized controlled trials that have highlighted the multifaceted benefits of DT and related psychotherapies. For instance, Seiler et al. reported that DT, whether administered independently or in conjunction with family caregivers (DT+), led to improvements in perceived quality of life and psychological stability in terminally ill patients. The study's significance was further emphasized by the stability of distress levels in the intervention group, in contrast to the worsening trajectory observed in the control group (Seiler & Jenewein, 2019). Similarly, Chen et al. (2024) demonstrated that DT significantly enhanced Dignity and reduced existential suffering in patients with hematologic malignancies, with high satisfaction scores reflecting its cultural adaptability and acceptability in a Chinese context (Chen et al., 2024).

Chochinov's Dignity Model serves as a clinical framework to operationalize the concept of dignity in end-of-life care. His model comprises three broad categories: illness-related concerns, dignity-conserving repertoire (e.g., continuity of self, role preservation), and social dignity inventory (e.g., burden to others, aftermath concerns). The interventions evaluated in this meta-analysis – particularly DT and IMCP-PC – consistently targeted these domains, leading to improved dignity preservation and reductions in demoralization and hopelessness (Chen et al., 2024; Fraguell-Hernando et al., 2020).

Reminiscence therapy, in particular, emerged as a robust modality for reducing anxiety and enhancing spiritual well-being. Liang and Zhang observed substantial declines in Hospital Anxiety and Depression Scale – Anxiety (HADS-A) and Hospital Anxiety and Depression Scale – Depression (HADS-D) scores and elevated spiritual well-being scores (Functional Assessment of Chronic Illness Therapy – Spiritual Well-Being [FACIT-Sp]) in elderly patients with metastatic

gastrointestinal cancer over a six-month RT protocol (Liang & Zhang, 2024). Comparable results were seen in Babaei et al.'s virtual RT implementation among gastric cancer patients, which effectively reduced depression and anxiety scores post-chemotherapy (Babaei et al., 2024). The consistent efficacy across delivery modes (in-person and virtual) underscores RT's scalability and suitability for remote care models.

Furthermore, interventions integrating life review or memory specificity training (LRT-MST) have demonstrated promising outcomes in enhancing ego integrity while reducing despair among palliative care patients (Kleijn et al., 2018). These findings align with Eriksonian psychosocial principles and underscore the importance of promoting autobiographical coherence and personal meaning in end-of-life care.

Logotherapy, grounded in Viktor Frankl's existential philosophy, also emerged as a promising intervention in this review. Group logotherapy led to statistically significant reductions in death anxiety and marked improvements in spiritual well-being among cancer patients. By helping individuals reframe suffering through purposeful living and the pursuit of meaning, logotherapy directly addresses the existential vacuum common in terminal illness. Its efficacy reinforces TMT's core proposition that affirming life's purpose reduces mortality-related distress (Faraji Emafti et al., 2019). Moreover, logotherapy complements the Chochinov Dignity Model, particularly by preserving dignity-conserving perspectives such as continuity of self, role identity, and generativity. Delivered in a group format, logotherapy additionally fosters peer support, validation, and shared meaning-making, factors shown to amplify therapeutic benefit in palliative settings (Alavi et al., 2022; Mamashli et al., 2021).

Although each intervention is grounded in existential principles, they differ in their core emphases. DT focuses on legacy and identity; CALM prioritizes relational and emotional processing; logotherapy promotes attitudinal change and spiritual transcendence; and RT facilitates emotional closure and narrative integration. Despite these differences, the results across all included studies demonstrate consistent psychological benefits – including reduced death anxiety, improved mood, and enhanced spiritual or existential well-being – indicating that these interventions are all effective, adaptable strategies in the psychological care of patients with advanced cancer.

This study contributes theoretically by reinforcing the foundational assumptions of existential and humanistic psychology, particularly Frankl's logotherapy, which posits that the will to meaning is a central motivational force in human beings (Frankl, 1992). The observed psychological benefits, such as improved mood, heightened dignity, and reduced anxiety support the notion that existential distress is not only prevalent but also amenable to therapeutic intervention in oncology populations (Alizadeh et al., 2021).

Furthermore, the consistency of outcomes across diverse cultural and geographical contexts (e.g., China, Iran, Switzerland, Netherlands) suggests that dignity-based interventions transcend cultural boundaries, affirming the universality of the human need for meaning, purpose, and psychosocial coherence at life's end (Faraji Emafti et al., 2019; Guo et al., 2022). This has implications for culturally sensitive adaptations of DT and related therapies, advocating for the incorporation of culturally specific values, familial structures, and communication styles into the therapeutic framework.

Although psychosocial interventions such as reminiscence therapy, life-review-based approaches, and meaning-centered therapies demonstrate clear benefits for reducing anxiety, depression, and existential distress, their implementation in oncology practice remains challenging. Barriers include limited time and staffing, the shortage of trained mental health professionals, patients' physical and cognitive limitations, stigma toward psychological care, and the need for cultural adaptation. Moreover, logistical constraints, technological barriers in virtual delivery, and the absence of standardized integration pathways within oncology workflows further complicate routine adoption. Addressing these challenges requires interdisciplinary collaboration, clinician training, and the development of feasible, scalable models of psychosocial support tailored to oncology settings.

The strength of this meta-analysis lies in its synthesis of high-quality randomized controlled trials conducted across diverse cultural and clinical settings, demonstrating both the feasibility and cross-cultural relevance of these interventions. However, heterogeneity in delivery models, baseline distress levels, and outcome measures remains a limitation. Furthermore, limited long-term follow-up data impairs our ability

to assess sustained efficacy, particularly in caregivers and bereaved family members.

From a clinical perspective, these findings support the integration of meaning-centered interventions into the standard of care for patients with advanced cancer. As existential concerns often overshadow physical symptoms in terminal stages, interventions such as DT, CALM, RT, and logotherapy offer psychologically sophisticated tools to preserve patient dignity, reduce emotional suffering, and foster spiritual peace. Future research should examine hybrid models that integrate elements across interventions, extend therapeutic support to caregivers, and explore scalable delivery formats, such as online platforms and telehealth-based services.

Limitation of study

This review has several limitations that may affect both internal and external validity. Considerable heterogeneity in intervention formats, duration, and session numbers, along with the use of diverse psychometric instruments (HADS, FACIT-Sp, Death and Dying Distress Scale [DADDS]), limits direct comparability across studies. Most trials also lacked long-term follow-up, reducing insight into the sustainability of therapeutic effects, while small sample sizes and attrition related to disease progression may introduce bias.

Potential publication bias remains underexplored, as most included studies reported positive outcomes, with few neutral or null findings. Moreover, cultural and spiritual factors known to shape perceptions of dignity, meaning, and death anxiety were not thoroughly examined across trials, limiting generalizability. Future research should adopt culturally sensitive approaches, provide more transparent contextual reporting, and include a more balanced range of published and unpublished evidence to enhance the robustness of conclusions.

Conclusion

This review demonstrates that existential therapies, particularly Dignity Therapy, Meaning-Centered Psychotherapy, logotherapy, and reminiscence therapy, are effective in reducing death anxiety and improving psychological well-being among adults with advanced cancer. These interventions consistently enhance meaning, dignity, and emotional resilience across diverse settings, indicating their value as complementary components of palliative care. Integrating existential therapies into routine oncology practice may promote more

holistic and patient-centered care. Future research should explore long-term effects, caregiver outcomes, and strategies to optimize implementation within multidisciplinary teams.

Ethical aspects and conflict of interest

This study is a systematic review and meta-analysis that synthesizes previously published research and does not involve direct data collection from human participants. All procedures adhered to established academic standards for conducting and reporting evidence-based reviews.

The authors declare that there is no conflict of interest related to the design, analysis, interpretation, or publication of this article.

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Author contributions

Conception and design (NH); literature search and data extraction (NH, RD, HS, TT, NR, WW); data analysis and interpretation (NH, RD, HS, TT); manuscript draft (NH); critical revision of the manuscript (RD, HS, TT, NH, WW); final approval of the manuscript (NH, RD, HS, TT, NR, WW).

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