



## Effectiveness of Palliative Care Interventions Offering Coping Skills to Women with Gynecological Cancers: A Systematic Review

Poojani Illangasinghe<sup>1</sup>, Pradeep Wijesinghe<sup>2</sup>, Palitha Karunapema<sup>1</sup>

<sup>1</sup>Health Information Unit, Ministry of Health, Sri Lanka

<sup>2</sup>De Soysa Maternity Hospital for Women, Sri Lanka

### ABSTRACT

**Background and aim:** Gynecological cancers, including ovarian, cervical, and uterine cancers, are among the most prevalent malignancies affecting women globally. Patients with these cancers frequently encounter substantial physical, psychological, and social challenges. This systematic review aims to evaluate the existing quantitative evidence on palliative care interventions that offer coping skills that facilitate the quality of life and psychological well-being of women with Gynecological Cancers.

**Method:** PubMed, Google Scholar, Clinical Key, and Cochrane Reviews databases were searched from 2000 to 2024. Articles in English with quantitative evidence were screened to determine whether the population included women with gynecological cancers, whether interventions were related to offering coping skills, whether control groups were available, and whether outcomes were related to psychological well-being and quality of life. Data were extracted to report on intervention models, outcome measures, and intervention outcomes. The risk of bias on randomization, allocation concealment, blinding, incomplete outcome data, selection of outcomes for reporting, and other biases was assessed by using the RoB 2, ROBINS I, and ROBINS E. Two independent reviewers were involved in all the above steps, with a third contributing to solving discrepancies. Meta-analysis was not done following heterogeneity assessments.

**Results:** Searches returned 297 unique articles, with twelve being for review. There were eight randomized controlled trials (RCT), two quasi-experimental trials, one cohort study, and one comparative study. The interventions or exposures included: group therapy based on coping strategies, supportive and coordinated care, communication therapies, mindfulness sessions, educational sessions, psychological counseling, and use of engagement in active coping and seeking social support. Seven studies measured psychological outcomes, six using multidimensional instruments. Five studies measured quality of life, and three used multidimensional instruments. Across the evaluated outcomes, the results consistently and significantly indicated benefits linked to providing coping skills. The majority of RCTs show significant ( $<0.05$ ) improvement in quality of life with the coping skills from the baseline to the endpoint as interval measures and Growth curve analyses based on the intent-to-treat approach showed that participants in both the coping and communication-enhancing intervention (CCI) and supportive counseling (SC) groups reported lower levels of depressive symptoms compared to those receiving usual care. In the Quasi-experimental trials survival expectancy by group interaction ( $\beta = 5.102$ ,  $P = 0.044$ ) was significant as well the patients who survived throughout the study, changes in FACT-G score were greater over time for patients with high survival expectancy in the treatment group compared to with all other patients.

**Conclusion:** Palliative care interventions offering coping skills are effective in supporting women with gynecological cancers. These interventions significantly contribute to enhancing their mental and emotional well-being and overall quality of life.

**KEYWORDS:** Palliative care, Gynecological Cancers, coping skills, systematic review.

### INTRODUCTION

Gynecological cancers—including ovarian, cervical, endometrial, vulvar, and vaginal cancers—remain a significant public health concern, contributing to considerable global morbidity and mortality among women. In 2020, it was estimated that 1.4 million new cases and over 600,000 deaths were attributed to gynecological malignancies worldwide, with cervical and ovarian cancers being the most prevalent and deadly, respectively (1). Low- and middle-income countries (LMICs) shoulder a disproportionate burden, accounting for nearly 85% of cervical cancer deaths due to limited access to screening, timely diagnosis, and advanced treatment options (2,3).



The impact of these cancers goes beyond the physical domain, as they are frequently associated with profound psychosocial challenges. Women diagnosed with gynecological cancer often report heightened levels of anxiety, depression, existential distress, sexual dysfunction, fear of recurrence, social isolation, and body image disturbances, particularly following invasive treatments like hysterectomy or oophorectomy (4–7). These emotional and psychological effects can persist long after treatment has ended, significantly impairing health-related quality of life (HRQoL) and overall well-being (8–10).

Palliative care, once predominantly associated with end-of-life support, has now evolved to encompass a more holistic, patient-centered approach that is integrated early in the cancer care continuum. It aims to relieve suffering by addressing physical, psychological, social, and spiritual dimensions of health, thereby enhancing the quality of life for both patients and their families (11–13). The World Health Organization (WHO) strongly advocates for early access to palliative care, especially in cancer care settings, as it has been associated with improved symptom control, reduced psychological distress, and even prolonged survival in some populations (14,15).

In gynecologic oncology, where disease progression is often unpredictable and emotionally complex, early palliative care interventions are increasingly recognized as essential. A growing body of evidence supports the integration of psychosocial and supportive interventions into palliative care to foster adaptive coping, emotional regulation, and resilience among patients navigating the cancer journey (16,17). Coping skills are defined as the cognitive and behavioral efforts individuals employ to manage stressors and challenging life events. Effective coping not only reduces psychological burden but also influences physiological outcomes, treatment adherence, and social functioning (18,19).

Various psychosocial interventions have been developed and tested in oncology settings to enhance coping. These include cognitive-behavioral therapy (CBT), mindfulness-based stress reduction (MBSR), expressive writing, supportive-expressive group therapy, narrative interventions, dignity therapy, and meaning-centered psychotherapy (20–22). Additionally, structured communication tools—such as decision aids and goal-of-care discussions—have been found to empower patients, enhance understanding of illness, and support shared decision-making (23,24).

Despite the promise of these interventions, current evidence on their effectiveness remains fragmented. The literature is heterogeneous in terms of study design, intervention components, outcome measures, and patient populations. Moreover, gynecologic cancer patients have historically been underrepresented in palliative care trials, limiting the generalizability of findings. Therefore, a systematic synthesis of the existing evidence is critical to understanding the effectiveness of palliative care interventions offering coping skills specifically to women with gynecological cancers.

## JUSTIFICATION

Despite the growing body of literature on palliative care and psychosocial interventions in oncology, there is a notable gap in synthesized evidence specifically addressing interventions that incorporate coping skills for women with gynecological cancers. Women diagnosed with these cancers often face unique psychosocial challenges, including reproductive concerns, sexual dysfunction, and altered body image, which may not be adequately addressed by general palliative care approaches (2,3).

Furthermore, the emotional and psychological impact of gynecological cancers can significantly affect treatment adherence, decision-making capacity, and overall quality of life. Coping-focused interventions hold the potential to mitigate these effects by fostering emotional resilience and supporting adaptive behavior. Understanding which coping interventions are most effective, and under what circumstances, is essential for guiding clinical practice and resource allocation.

While individual studies have evaluated coping-based interventions, their methodologies, target populations, and outcomes differ widely. A systematic synthesis of this evidence is necessary to clarify their overall effectiveness and provide guidance for integrating such interventions into routine palliative care for this population. This review will fill an important gap in the literature by consolidating existing quantitative evidence on the subject.

## OBJECTIVES

This systematic review aims to evaluate the existing quantitative evidence on palliative care interventions that offer coping skills to facilitate the quality of life and psychological well-being of women with gynecological cancers.



## METHODS

### Study Design

This systematic review was conducted by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (9). A protocol was developed and registered in PROSPERO 2024 CRD42024583462. Available from <https://www.crd.york.ac.uk/PROSPERO/view/CRD42024583462>.

### Eligibility Criteria

Studies were included if they met the following criteria:

Population: Adult women (aged  $\geq 18$  years) diagnosed with any type of gynecological cancer (ovarian, cervical, endometrial, vulvar, or vaginal).

Intervention: Palliative care interventions that explicitly incorporated coping skills (e.g., cognitive-behavioral therapy, mindfulness, relaxation, meaning-centered therapy).

Comparison: Standard care, no intervention, or other non-coping-focused palliative interventions.

Outcomes: Quantitative assessment of psychological well-being (e.g., anxiety, depression, distress) and/or quality of life.

Study design: Randomized controlled trials (RCTs), quasi-experimental studies, or pre-post studies with quantitative outcome measures.

Language: Studies published in English.

Exclusion criteria included:

Studies involving mixed cancer populations without disaggregated data for gynecological cancers.

Studies focused solely on pharmacological symptom management or spiritual/religious interventions without a coping component.

Qualitative studies, case reports, editorials, or conference abstracts without full texts.

### Information Sources and Search Strategy

A comprehensive search was conducted in the following electronic databases: PubMed/MEDLINE, Embase, PsycINFO, CINAHL, and the Cochrane Central Register of Controlled Trials (CENTRAL). The search was limited to studies published from January 2000 to January 2024.

The search strategy combined keywords and Medical Subject Headings (MeSH) related to:

"Palliative care", "coping skills", "psychological intervention", "mindfulness", "cognitive behavioral therapy" AND "Gynecologic cancer", "ovarian cancer", "cervical cancer", "uterine cancer"

A sample search string for PubMed:

("Palliative Care"[Mesh] OR "Supportive Care") AND ("Coping Skills" OR "Mindfulness" OR "Cognitive Behavioral Therapy") AND ("Gynecologic Neoplasms"[Mesh] OR "Ovarian Cancer" OR "Cervical Cancer" OR "Endometrial Cancer")

### Study Selection

All identified articles were imported into reference management software and duplicates removed. Two independent reviewers screened titles and abstracts for relevance. Full texts of potentially eligible articles were retrieved and assessed against the inclusion criteria. Discrepancies were resolved through discussion or consultation with a third reviewer.

### Data Extraction

A standardized data extraction form was used to collect information on study characteristics (author, year, country, setting, design), Participant characteristics (sample size, age, cancer type), Intervention details (type, duration, delivery method, components), Comparison group, Outcome measures, Key findings, and effect sizes

Data were extracted independently by two reviewers. Authors were contacted for missing or unclear data when necessary.

### Quality Assessment

Methodological quality of included studies was assessed independently by two reviewers using the Cochrane Risk of Bias 2 (RoB 2) tool for RCTs and the Joanna Briggs Institute (JBI) Critical Appraisal Tool for quasi-experimental or non-randomized studies. Discrepancies were resolved through discussion.

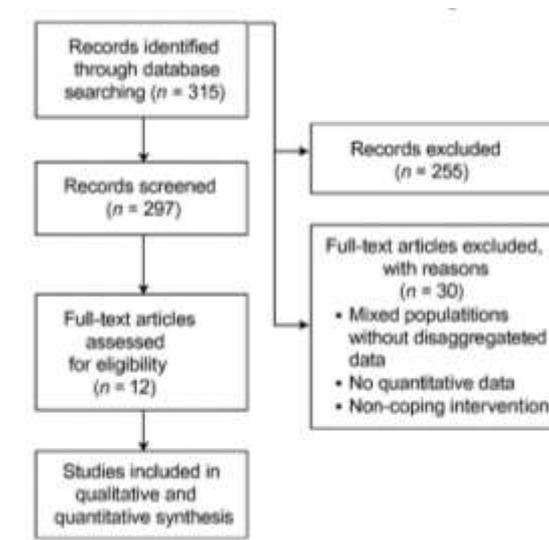
**Data Synthesis**

A narrative synthesis was conducted due to heterogeneity of study designs, interventions, and outcome measures. Where feasible, effect sizes (e.g., mean differences, standardized mean differences) were extracted or calculated for key outcomes. Meta-analysis was not considered as there were no at least three studies reported comparable outcomes using similar measures.

**RESULTS**

**Study Selection**

The initial search yielded 297 unique articles after duplicates were removed. Title and abstract screening excluded 255 articles. Full-text screening of 42 articles led to the exclusion of 30 articles for reasons including mixed populations without disaggregated data and non-quantitative outcomes. Twelve studies met inclusion criteria for this review (Figure 1).



**Figure 1: Article selection process for the systematic review.**

**Study Characteristics**

Of the 12 included studies, eight were randomized controlled trials (RCTs), two were quasi-experimental trials, one was a cohort study, and one was a comparative study. Interventions involved group therapy based on coping strategies, supportive and coordinated care, communication therapies, mindfulness sessions, educational sessions, psychological counseling, and promotion of active coping and social support.

**Outcome Measures**

Seven studies measured psychological outcomes, six using multidimensional psychological instruments. Five studies measured quality of life, three using multidimensional QoL instruments.

**Effectiveness**

All studies consistently demonstrated significant benefits associated with coping skills interventions ( $p < 0.05$ ). Most RCTs showed significant improvement in quality of life from baseline to endpoint. Growth curve analyses indicated that participants receiving coping and communication-enhancing interventions and supportive counseling reported lower depressive symptoms than usual care groups.

In quasi-experimental trials, survival expectancy by group interaction was significant ( $\beta = 5.102, P = 0.044$ ), with greater improvements in FACT-G scores over time among patients with high survival expectancy receiving the intervention.

**DISCUSSION**

This systematic review synthesized quantitative evidence regarding the effectiveness of palliative care interventions incorporating coping skills for women with gynecological cancers. Across twelve studies, including eight randomized controlled trials and several



quasi-experimental designs, interventions aimed at enhancing coping skills consistently yielded significant improvements in psychological well-being and quality of life. These findings underscore the critical role of coping-focused palliative care in addressing the complex emotional and psychosocial challenges faced by this population.

### Effectiveness of Coping Skills Interventions

The majority of included randomized controlled trials demonstrated statistically significant improvements in quality of life from baseline to study endpoints. Interventions such as coping and communication-enhancing strategies and supportive counseling not only reduced depressive symptoms but also improved multidimensional aspects of well-being. The consistent direction of these findings aligns with existing literature on coping-focused psychosocial interventions in cancer care more broadly (10,11).

Notably, quasi-experimental evidence also highlighted the potential for coping skills interventions to positively influence outcomes linked to survival expectancy and functional well-being, as demonstrated by significant improvements in FACT-G scores among patients with higher survival expectancy receiving intervention. This suggests that psychological support may contribute to both subjective and clinical benefits, potentially by fostering resilience and engagement with treatment.

### Implications for Clinical Practice

Given the complex and multifaceted psychosocial burdens of gynecological cancers—including concerns around fertility, body image, sexuality, and existential distress—targeted coping skills interventions can fill critical gaps unmet by standard oncological or palliative care. Incorporating structured communication, mindfulness, psychological counseling, and educational sessions into routine palliative care services may enhance patients' ability to manage distress, improve adherence, and promote holistic quality of life.

Clinicians and healthcare systems should consider the early integration of coping skills-focused palliative care interventions, ideally delivered by multidisciplinary teams trained in psycho-oncology and palliative support. Tailoring interventions to individual patient needs and cultural contexts will likely maximize their effectiveness.

### Limitations of the Evidence

The heterogeneity of study designs, interventions, outcome measures, and follow-up durations presents challenges to synthesizing findings and generalizing results. While most studies reported positive effects, variations in intervention components and delivery limit the ability to identify which specific techniques are most effective. Small sample sizes in some studies and potential risk of bias, including lack of blinding and attrition, also temper confidence in the findings.

Additionally, the majority of studies originated from high-income countries, limiting applicability to low- and middle-income settings where resource constraints and cultural factors may influence intervention feasibility and acceptability.

### Future Research Directions

Further high-quality randomized controlled trials with larger, diverse samples are warranted to clarify the efficacy of distinct coping skills interventions, explore mechanisms of effect, and evaluate long-term outcomes. Research should prioritize culturally sensitive approaches and assess cost-effectiveness to support broader implementation. Moreover, integration of qualitative studies may enrich understanding of patient experiences and preferences.

## CONCLUSION

This review highlights the promising role of palliative care interventions offering coping skills in enhancing psychological well-being and quality of life among women with gynecological cancers. Incorporation of such interventions into standard care protocols has the potential to address unmet psychosocial needs and improve holistic cancer care. Continued research is essential to refine intervention components, optimize delivery, and expand accessibility across diverse healthcare settings.

## REFERENCES

1. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 2021;71(3):209–249.
2. Arbyn M, Weiderpass E, Bruni L, de Sanjosé S, Saraiya M, Ferlay J, Bray F. Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis. *Lancet Glob Health.* 2020;8(2):e191–203.



3. Denny L, Anorlu R. Cervical cancer in Africa. *Cancer Epidemiol Biomarkers Prev.* 2012;21(9):1434–1438.
4. Sekse RJT, Hufthammer KO, Vika ME, Ellertsen B, Råheim M. Fatigue and quality of life in women treated for various types of gynecological cancers: A cross-sectional study. *J Obstet Gynaecol.* 2014;34(5):476–80.
5. Bodurka-Bevers D, Basen-Engquist K, Carmack CL, Fitzgerald MA, Wolf JK, de Moor C, Gershenson DM. Depression, anxiety, and quality of life in patients with epithelial ovarian cancer. *Gynecol Oncol.* 2000;78(3 Pt 1):302–308.
6. Ozga M, Lobczowska K, Grodzki T, Rzechonek A, Dziedzic R. Body image in patients undergoing surgery for gynecological malignancies. *Psychooncology.* 2021;30(1):104–110.
7. Hersch J, Juraskova I, Price MA, Mullan B, Butow P. Psychological distress in women with gynecologic cancer: A systematic review of longitudinal studies. *Gynecol Oncol.* 2009;114(3):598–604.
8. Cormie P, Galvão DA, Newton RU, Hayes SC. Exercise therapy in cancer: why it is needed, how it works, and what it can achieve. *Nat Rev Clin Oncol.* 2018;15(12):731–745.
9. Faller H, Schuler M, Richard M, Heckl U, Weis J, Küffner R. Effects of psycho-oncologic interventions on emotional distress and quality of life in adult patients with cancer: systematic review and meta-analysis. *J Clin Oncol.* 2013;31(6):782–793.
10. Kissane DW, Patel SG, Baser RE, Bell R, Farberov M, Ostroff JS, et al. Prevalence of depression and anxiety in patients with cancer undergoing radiotherapy: a longitudinal study. *J Clin Oncol.* 2008;26(35):6069–6075.
11. World Health Organization. Palliative care. <https://www.who.int/news-room/fact-sheets/detail/palliative-care>. Accessed June 2024.
12. Ferrell BR, Temel JS, Temin S, Alesi ER, Balboni TA, Basch EM, et al. Integration of palliative care into standard oncology care: American Society of Clinical Oncology Clinical Practice Guideline update. *J Clin Oncol.* 2017;35(1):96–112.
13. Kaasa S, Loge JH, Aapro M, Albrecht T, Anderson R, Bruera E, et al. Integration of oncology and palliative care: a Lancet Oncology Commission. *Lancet Oncol.* 2018;19(11):e588–653.
14. Temel JS, Greer JA, Muzikansky A, Gallagher ER, Admane S, Jackson VA, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med.* 2010;363(8):733–742.
15. Haun MW, Estel S, Rücker G, Friederich HC, Villalobos M, Thomas M, Hartmann M. Early palliative care for adults with advanced cancer. *Cochrane Database Syst Rev.* 2017;(6):CD011129.
16. Applebaum AJ, Breitbart W. Palliative care in psycho-oncology. *Cancer J.* 2013;19(5):394–401.
17. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Palliative Care. Version 2.2023.
18. Folkman S, Moskowitz JT. Positive affect and the other side of coping. *Am Psychol.* 2000;55(6):647–654.
19. Stanton AL, Rowland JH, Ganz PA. Life after diagnosis and treatment of cancer in adulthood: contributions from psychosocial oncology research. *Am Psychol.* 2015;70(2):159–174.
20. Garland SN, Tamagawa R, Todd SC, Specia M, Carlson LE. Increased mindfulness is related to improved stress and mood following participation in a mindfulness-based stress reduction program in individuals with cancer. *Integr Cancer Ther.* 2013;12(1):31–40.
21. Breitbart W, Poppito S, Rosenfeld B, Vickers AJ, Li Y, Abbey J, et al. Pilot randomized controlled trial of individual meaning-centered psychotherapy for patients with advanced cancer. *J Clin Oncol.* 2012;30(12):1304–1309.
22. Pennebaker JW. Writing about emotional experiences as a therapeutic process. *Psychol Sci.* 1997;8(3):162–166.
23. Walczak A, Butow PN, Bu S, Clayton JM. A systematic review of evidence for end-of-life communication interventions: who do they target, how are they structured, and do they work? *Patient Educ Couns.* 2016;99(1):3–16.
24. Epstein RM, Street RL Jr. The values and value of patient-centered care. *Ann Fam Med.* 2011;9(2):100–103.

Cite this Article: Illangasinghe, P., Wijesinghe, P., Karunapema, P. (2025). Effectiveness of Palliative Care Interventions Offering Coping Skills to Women with Gynecological Cancers: A Systematic Review. *International Journal of Current Science Research and Review*, 8(7), pp. 3751-3756. DOI: <https://doi.org/10.47191/ijcsrr/V8-i7-64>