NURSING INTERVENTIONS TO PROMOTE COPING IN PATIENTS WITH CANCER: A SCOPING REVIEW

Intervenções de enfermagem promotoras do coping na pessoa adulta com doença oncológica: Uma scoping review

AUTHORS:

- Ana Raquel Soares Pereira¹ Concetualização, Análise Formal, Investigação, Metodologia, Redação do rascunho original e Redação
- Ana Sofia Azevedo Camacho¹ Análise Formal, Investigação, Metodologia
- Bruno Miguel da Costa Santos² Investigação, Metodologia, Supervisão, Concetualização, Análise formal, Investigação, Metodologia, Redação (revisão e edição)
- Tânia Marlene Gonçalves Lourenço³

Concetualização, Análise formal, Investigação, Metodologia, Redação (revisão e edição)

- ¹Centro de Saúde de Santo António, SESARAM EPERAM, Funchal, Portugal
- ² Escola Superior de Saúde Cruz Vermelha Portuguesa Alto Tâmega, Chaves, Portugal;
- ³ Escola Superior de Enfermagem de São José de Cluny, Funchal, Portugal

Autor/a de correspondência: Ana Pereira anaraquelspereira@gmail.com



ABSTRACT

Introduction: A cancer diagnosis is a life-changing event that often causes distress, adversely affecting quality of life and survival. Interest in interventions aimed at supporting emotional, social, and behavioural adaptation has grown, establishing them as a key quality indicator in oncology care. **Objective:** To map nursing interventions that promote coping in cancer patients. **Methodology:** A scoping review was conducted following the Joanna Briggs Institute methodology (JBI) and PRISMA-ScR guidelines. Searches were carried out in databases such as CINAHL, MEDLINE, and the Cochrane Library® covering the period from 2019 to 2024. The study protocol was registered on OSF with registration number 10.17605/OSF.IO/TUCMA. **Results:** Of 1,547 records identified, 18 were included in the final analysis. Cognitive-behavioural interventions were the most prevalent, with most programmes comprising 6 to 12 sessions, each lasting between 45 and 90 minutes. **Conclusion:** Mapping nursing interventions that promote coping in cancer patients provides valuable insights for clinical decision-making and the dissemination of scientific evidence.

KEYWORDS: Psychological adaptation; Coping Skills; Nursing Intervention; Oncology Nurse.

RESUMO

Introdução: A doença oncológica configura-se como um evento adverso que frequentemente provoca distress, impactando negativamente a qualidade de vida e a sobrevivência. O interesse nas intervenções focadas na adaptação emocional, social e comportamental tem aumentado, tornando-se um indicador de qualidade nos cuidados oncológicos. Objetivo: Mapear as intervenções de enfermagem promotoras do coping nas pessoas com doença oncológica. Metodologia: Realizada uma Scoping Review, segundo a metodologia proposta pelo Joanna Briggs Institute (JBI) e as diretrizes PRISMA-ScR. Consultaram-se bases de dados como: CINAHL, MEDLINE e Cochrane Library® entre 2019 e 2024. O protocolo do estudo foi registado na OSF com o número de registo 10.17605/OSF.IO/TUCMA. Resultados: Dos 1547 registos, foram extraídos para análise 18. As intervenções cognitivo-comportamentais destacaram-se com programas compostos por 6 a 12 sessões de 45 a 90 minutos. Conclusão: Este mapeamento constitui-se uma ferramenta importante na tomada de decisões clínicas e na disseminação da evidência científica.

PALAVRAS-CHAVE: Adaptação Psicológica; Habilidades de decisão; Interveção Enfermagem; Enfermagem Oncológica.

Introduction

The incidence of oncological diseases has progressively increased, with an estimated 19.9 million new cancer cases diagnosed worldwide in 2022, of which 69.6 thousand were diagnosed in Portugal.¹ According to GLOBOCAN Statistics, 2022, it is projected that over 35 million new cancer cases will occur by 2050, an increase of 77% compared to the 20 million cases estimated in 2022.2 Survival rates have also seen significant improvements, with approximately 12 million survivors in Europe, due to advances in early detection, effective therapies, and supportive care.³ Cancer diagnosis continues to be regarded as an adverse life event that requires emotional adjustment, which often negatively impacts the quality of life of individuals with cancer and may potentially affect their survival.⁴ Recent studies indicate that, despite significant scientific progress, the prevalence of clinically significant distress in individuals with oncological disease remains at approximately 50%.5-6 Emotional issues, particularly anxiety and depression, are the most frequently reported problems, followed by family-related issues and the exacerbation of physical symptoms. Scientific evidence suggests that about one-third of this population presents with symptoms of psychiatric disorders, with anxiety and depression being the most common, regardless of the type, stage, or phase of the disease.⁷⁻⁹ However, the emotional response to stressors related to this condition is represented on a spectrum that can range from normative symptoms, such as distress, worry, uncertainty, sadness, and even hopelessness, to severe emotional symptoms that may eventually meet the diagnostic thresholds for psychiatric disorders. 10-12 Therefore, it is the responsibility of healthcare professionals to understand the difference between non-pathological fluctuations resulting from short-term emotional responses to life challenges and more specific and impactful psychopathological conditions, such as anxiety disorders and depressive disorders.¹³ According to some authors, early recognition and intervention optimise patients' emotional regulation, decision-making capacity, and treatment adherence.¹⁴ Additionally, the emotional support of individuals with cancer is considered an integral part of quality care delivery.¹⁵ International guidelines indicate that monitoring and intervening in the emotional distress of these patients is a minimum standard of practice in oncological care and is considered an indicator of the quality of care provided by healthcare professionals, particularly nurses. 16-18 Despite growing recognition of the nurse's role in delivering holistic, patient-centred care that includes emotional and psychological support¹⁹ there remains a lack of standardised, well-documented interventions tailored to help cancer patients cope with the emotional impact of their diagnosis and treatment.¹⁶ A preliminary exploratory search across major databases revealed no existing scoping reviews on this topic, highlighting a knowledge gap. Therefore, this study aims to map the available evidence on nursing interventions that promote coping in adults with cancer, providing a foundation for evidence-based practice, enhancing the quality of psychosocial care in oncology nursing, and supporting the optimisation of coping strategies implemented in clinical settings.

Methodology

This scoping review was conducted following the methodology recommended by the Joanna Briggs Institute (IBI) and aligned with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)20. The primary objective was to map nursing interventions and programmes aimed at promoting coping in adults with cancer. The research question guiding this review is: "What nursing interventions and programmes promote coping in adults with cancer?". The research question and the eligibility criteria were defined using the PCC mnemonic (Population, Concept, and Context) in accordance with the methodology proposed by the IBI. 19 Regarding the context (C), all intervention contexts were considered without restriction. The review included primary studies, specifically quantitative studies, qualitative studies, and studies employing a mixed-methods approach, including those using methodological triangulation. Exclusion criteria applied were records that did not involve nursing interventions; those focused solely on family members, partners, or caregivers; and records with therapeutic interventions aimed at children and adolescents, due to the specific nature of interventions required for these groups. To ensure both the relevance and recency of the data, a temporal filter was applied, covering the period from 1 February 2019 to 1 February 2024. The search was conducted via EBSCOhost Web® using the following databases: Cumulative Index to Nursing and Allied Health (CINAHL Ultimate®), MedicLatina®, Medical Literature Analysis and Retrieval System Online (MEDLINE®), Library, Information Science & Technology Abstracts, and Nursing & Allied Health Collection Comprehensive. The Boolean equation used was: (((Neoplasms) OR (Cancer) OR ("Cancer Patient")) NOT (Child))) AND ((Adaptation) OR (Psychological) OR (Coping)) AND ((Nursing) OR ("Nursing care")). For the Cochrane Library® database, a Boolean equation tailored to its specific cataloguing and indexing structure was employed to maximise search sensitivity and precision (Lefebvre et al., 2019):

(Neoplasms OR Cancer OR "Cancer Patient" NOT Child) AND (Adaptation, Psychological OR Coping) AND (Nursing OR "Nursing care"). The search results were exported to Rayyan software, where duplicate records were removed. The review involved two independent reviewers who analysed the selected records according to the predefined inclusion and exclusion criteria. Discrepancies were resolved through consensus or consultation with a third reviewer. Record selection occurred in three stages: first, titles and abstracts were screened against the inclusion criteria. Second, reference lists of included studies were checked to identify additional relevant studies. In the third stage, full texts were reviewed to confirm eligibility. To map the data, the reviewers developed collection instruments, and the extracted information was presented in a narrative format, discussing the results in relation to the research objectives. The analysis was conducted in two phases: the first involved a descriptive analysis

of the methodological characteristics of the records, including the year, origin, study design, cancer type and stage, and sample size. The second phase categorised the evidence into four groups of nursing interventions: typology, format, frequency, and assessment tools. The study protocol was registered on OSF with the registration number 10.17605/OSF.IO/TUCMA on October 2024.

Results

Search and Selection Process

The initial search yielded 1,547 records, comprising 262 from CINAHL Ultimate®, 980 from MEDLINE®, 3 from the Library, Information Science & Technology Abstracts, 6 from MedicLatina®, 96 from the Nursing & Allied Health Collection Comprehensive, and 200 from the Cochrane Library®. Among these, 261 duplicates were identified and removed. Following this process, 1,286 records were retained for screening and analysis, ultimately leading to the inclusion of 18 records. No additional relevant records were identified through checking the reference lists of included studies. Figure 1 depicts the PRISMA-ScR flowchart, illustrating the process of record selection and inclusion.

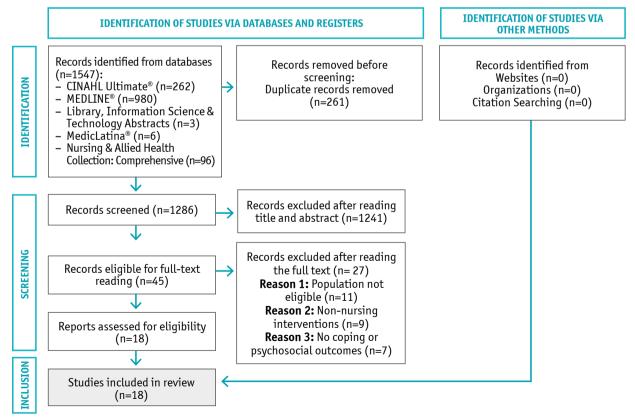


Figure 1. Flowchart PRISMA extension for scoping reviews

Overview of Included Studies

The analysis of the 18 included records facilitated an evaluation of the operationalisation of intervention programmes designed to promote coping in individuals with cancer. This analysis outlines the methodologies, structures, nursing interventions, and characteristics of the target population, including the type and stage of the disease. Table 1 provides a summary of the key records, emphasising their main objectives and the outcomes achieved.

Table 1. Records included in the Scoping Review

	AUTHORS	METHODOLOGY	OBJECTIVES	RESULTS/CONCLUSIONS	
1	Pourfallahi et al. (2020) ²¹	Quasi-experimental study with pre-post test	To analyse the impact of an informational and emotional support program, implemented by nurses, on the perceptions of the disease and on the emotional management of people with cancer.	A 10-week information and emotional support program implemented by nurses can lead to changes in perceptions of the disease without altering the effectiveness of emotional management.	
2	Sowada (2019) ²²	Systematic Literature Review	To carry out an integrative literature review that reinforces the scientific evidence inherent in the practice and health gains of qigong in people with cancer, with an emphasis on the management of fatigue secondary to the disease process.	The analysis of the 22 studies indicated that the use of tai chi and qigong significantly improves fatigue, depression, sleep disturbances, and overall quality of life in people with cancer.	
3	Samami et al. (2021) ²³	Randomized controlled clinical trial	Investigate the effect of a program promoting coping strategies and stress management for women with breast cancer.	The program showed a significant increase in problem-focused coping, but a decrease in emotion-focused coping scores. This can be explained by the stage of the pathological process, limited number of sessions, short interval between sessions and smaller sample size.	
4	Chow et al. (2020) ²⁴	Randomized clinical trial	To evaluate the effects of a psychoeducational intervention program focused on disease uncertainty, anxiety and sexual functioning in a cohort of Chinese patients with gynecological cancer.	Users who received psychoeducational intervention reported significantly greater reductions in illness ambiguity, inconsistency and general uncertainty, as well as greater likelihood of being sexually active, increased libido for partners and greater intimacy between the couple.	
5	Chen et al. (2021) ²⁵	Pre/post- intervention pilot study	To evaluate the feasibility and preliminary efficacy of the FOCUS psychoeducational program implemented by nurses in an oncology day hospital for patients and their families.	The results indicated an increase in self- efficacy in both users and caregivers, greater emotional well-being in users and a higher quality of life in caregivers, as well as a decrease in substance use by caregivers.	
6	Pace et al. (2019) ²⁶	Randomized clinical trial	To compare the acceptability and effectiveness of Cognition-Based Compassion Training with Cancer Health Education in improving depressive symptoms and other domains of quality of life in cancer survivors and informal caregivers. As well as to determine the relationship between the results of the health care received with biomarkers of inflammation and diurnal cortisol rhythm.	This study aims to determine whether Cognition-Based Compassion Training is more effective than Cancer Health Education in improving depressive symptoms and quality of life, as well as optimizing the results of biomarkers of inflammation and the diurnal cortisol rhythm.	
7	Hamidian et al. (2019) ²⁷	Quasi- experimental study	To determine the effect of cognitive-behavioural training on post-traumatic growth in women with breast cancer referred for chemotherapy treatment.	Cognitive-behavioural intervention has shown a positive and significant effect on post-traumatic growth in women with breast cancer.	

	AUTHORS	METHODOLOGY	OBJECTIVES	RESULTS/CONCLUSIONS	
8	Fergus et al. (2022) ²⁸	Randomized clinical trial	This study aims to examine participants' perceptions regarding three key aspects: the structure and content of the online intervention, the value of including a professional facilitator, and the benefits and drawbacks of the CoupleLinks program.	The study explores the benefits of using the Couplelinks platform for couples, highlighting its role in promoting open communication channels, creating shared quality moments, evoking feelings of togetherness and stimulating new insights into the relationship. These benefits position online interventions as a viable and flexible alternative to traditional couples counselling, offering an approach that is accessible and adaptable to contemporary needs.	
9	Chen et al. (2022) ²⁹	Pilot Study	To evaluate the feasibility and acceptability of the Caring for Couples Coping with Colorectal Cancer (4Cs: CRC) program.	It aims to demonstrate that the Caring for Couples Coping with Colorectal Cancer (4Cs: CRC) program can effectively support couples dealing with colorectal cancer in mainland China.	
10	Lai et al. (2021) ³⁰	Experimental Study	To determine the effectiveness of cognitive behavioural techniques (CBT) in improving the quality of sleep, anxiety, depression and health of individuals with breast cancer.	The results suggest that CBT increases sleep quality, reduces anxiety and depressive symptoms, optimizes users' coping skills and consequently improves their quality of life.	
11	Nasution et al. (2020) ³¹	Quasi-experimental quantitative study with pre- and post- tests	This study aims to determine the effectiveness of spiritual intervention on the coping and spiritual well-being of gynecological cancer patients.	This study showed that coping and spiritual well-being in the intervention group increased significantly after receiving the spiritual intervention. The first and third sessions promote emotion-focused coping, while the second and fourth sessions promote problem-focused coping.	
12	Matthys et al. (2021) ³²	International multicenter randomized three- arm clinical trial	To evaluate the DIAdIC study, which will determine the effectiveness of two psychosocial and educational interventions aimed at improving the emotional functioning and self-efficacy of the family caregiver-user dyad.	This study aims to determine which type of intervention promotes the best results in terms of the emotional functioning and self-efficacy of the user-caregiver/family member dyad.	
13	Johns et al. (2020a) ³³	Non-randomized, single-arm pilot study	To evaluate the feasibility, acceptability and preliminary effects of a mindfulness-based intervention to facilitate advance care planning (ACP) for adults with advanced cancer and their families/caregivers.	The mindfulness intervention showed feasibility and acceptability, promoting improvements in advance care planning (ACP) and associated results for users and caregivers/family members.	
14	Lambert et al. (2021) ³⁴	Multicenter, stratified, parallel, pilot randomized clinical trial with two groups.	To test the acceptability and reliability of the TEMPO (Tailored, Web-based, Psychosocial, and Physical Activity Self-Management) program for men with prostate cancer and their caregivers.	The TEMPO program aims to assess whether it improves psychosocial self-management and physical activity in men with prostate cancer, as well as in their caregivers and family members.	
15	Kim & Yoo (2022) ³⁵	Quasi-experimental study with pre-and post-test	To investigate the effects of a nurse-led advanced practice psychoeducational program on distress, anxiety, depression, cancer coping, health-promoting behaviour and quality of life in colorectal cancer survivors.	The psychoeducation program showed positive effects in reducing suffering and anxiety among cervical cancer survivors, enhancing their coping abilities, and improving their overall quality of life.	
16	Reb et al. (2020) ³⁶	Mixed single-group studies	To assess the feasibility, acceptability and preliminary effects of a nurse-led intervention to manage fear of cancer progression in patients with advanced cancer.	The analysis showed improvements over time in fear of disease progression. Skills training helped control anxiety and fear, and participants reported feeling calmer and more focused.	

	AUTHORS	METHODOLOGY	OBJECTIVES	RESULTS/CONCLUSIONS	
17	Johns et al. (2020b) ³⁷	Three-arm Randomized Clinical Trial	To evaluate the feasibility and preliminary effectiveness of group-based Acceptance and Commitment Therapy (ACT) for Fear of Cancer Recurrence (FCR) in women with breast cancer.	The study found that group Acceptance and Commitment Therapy (ACT) is a promising intervention for women who have undergone breast-conserving surgery. It was effective in reducing fear of cancer recurrence and other psychological difficulties, as measured by the Perceived Stress Scale (PSS) and the Memorial Symptom Assessment Scale (MSAS).	
18	Peixoto et al. (2023) ³⁸	Pilot Study Protocol	To present the protocol for a pilot study aimed at assessing the acceptability and feasibility of a psychoeducational nursing intervention designed to promote the adaptation of cancer survivors, with a focus on coping and anxiety.	The study aims to demonstrate the effectiveness of the proposed psychoeducational intervention program in enhancing adaptation among cancer survivors, optimizing coping strategies, and reducing anxiety symptoms.	

Characteristics of Interventions

These records highlighted the integration of interventions and programmes developed by nurses, with their characterisation (encompassing their name, target

population, methodology, interventions, structure, and operationalisation) presented in Table 2.

Table 2. Characterization of the programs and interventions developed by nurses - Part I

AUTHOR/	PROGRAM NAME	TARGET POPULATION	PROGRAM STRUCTURE		
YEAR/ COUNTRY			TYPE OF SESSIONS	SESSION FEATURES	INTERVENTIONS
Pourfallahi et al. (2020) ²¹ -Iran -	Support Care Cancer	Cancer patients on chemotherapy treatment (n: 80)	Individual Intervention	10 sessions weekly 5 face-to-face sessions (45' a 90') + 5 follow-up telephone sessions (7' a 10')	Cognitive behavioural intervention a) Emotional support program
Sowada (2019) ²² - USA -	Qigong	Fatigue management in cancer survivors	Prevalence of group- based interventions	Predominance of records with 12 weekly sessions	Predominance of records in the field of cognitive behavioural intervention
Samami et al. (2021) ²³ - Iran -	Supportive program on coping strategies and stress in women diagnosed with breast cancer	Women with breast cancer, up to one year after diagnosis, undergoing chemotherapy. (n=60)	Group Intervention	6 sessions weekly (90') + 1 follow up assessment at the end of the 1st month + homework	Cognitive behavioural intervention a) Diaphragmatic breathing b) Progressive muscle relaxation training, c) Coping strategies training d) Stress management e) Emotional regulation
Chow et al. (2020) ²⁴ - China -	EIP	Women with newly diagnosed gynecological cancer ((n = 202)	Individual intervention	4 sessions - 1st, 2nd and 4th: face-to-face sessions (45' to 60') 3rd: telephone session (20 to 35')	Psychoeducational intervention

AUTHOR/	PROGRAM NAME	TARGET POPULATION	PROGRAM STRUCTURE		
YEAR/ COUNTRY			TYPE OF SESSIONS	SESSION FEATURES	INTERVENTIONS
Chen et al. (2021) ²⁵ - USA-	FOCUS	Adult Cancer patients and their caregivers /family members (n=60)	Dyadic intervention	6 to 9 weeks of intervention 3 sessions: 2 home visits (6 weeks apart) + 1 telephone session of 30' + educational material	Cognitive behavioural intervention a) Psychosocial intervention b) Motivational interviewing c) Aid relationship d) Psychoeducational intervention
Pace et al. (2019) ²⁶ - USA -	CBCT (Cognition- Based Compassion Training) + CHE (Cancer Health Education)	Solid Tumor Survivors who have completed treatments other than hormone therapy and their caregivers/family (n=40 dyads)	Dyadic intervention	CBCT: 8 sessions weekly + 2 follow up sessions CHE: 8 face-to-face sessions (120'/ weekly) + 10' homework + telephone contacts	Cognitive behavioural intervention a) Compassion training based on cognition and psychoeducation
Hamidian et al. (2019) ²⁷ - Iran -	Cognitive Emotional Training on Post- traumatic Growth	Patients with Breast Cancer (n=85)	Group intervention	3 weeks 5 sessions (2x/week, 60' a 90')	Cognitive behavioural intervention a) Cognitive-emotional training in post-traumatic growth
Fergus et al. (2022) ²⁸ - Canada -	Couplelinks	Young couples dealing with breast cancer on a chemotherapy treatment (n=86)	Dyadic intervention	8 weeks: 6 asynchronous online sessions + weekly homework + telephone follow-up	Psychoeducational intervention a). Assertive communication training
Chen et al. (2022) ²⁹ - China -	Caring for Couples Coping with Colorectal Cancer "4Cs: CRC" Program	Couples dealing with colorectal cancer (n= 20 dyads)	Dyadic intervention	6 weeks: 5 online sessions weekly + 3 face-to-face sessions, twice a week (60' to 90')	Cognitive behavioural intervention
Lai et al. (2021) ³⁰ - Taiwan -	Cognitive Behavioural Therapy plus Coping Manage-ment for Depression and Anxiety (CBTM)	Breast cancer patients during the recovery period. Experimental group (n=36), Control group (n=34)	Group intervention	12 sessions /2h / weekly	Cognitive behavioural intervention focused on identity a)Problem-solving training, b)Restructuring dysfunctional beliefs, c)Promoting coping, d)Relaxation and rehabilitation techniques. e)Symptom management
Nasution et al. (2020) ³¹ - Indonesia -	Spiritual Intervention towards Coping and Spiritual Well-being	Patient with gynecological cancer (n=108)	Group intervention	2 weeks: 4 sessions (60' a 90')	Psychotherapeutic intervention with a focus on spirituality: a)Relaxation techniques, b)Assertive communication training c) Promoting coping

AUTHOR/		TARGET POPULATION	PROGRAM STRUCTURE		
YEAR/ COUNTRY	PROGRAM NAME		TYPE OF SESSIONS	SESSION FEATURES	INTERVENTIONS
Matthys et al. (2021) ³² - Belgium, Denmark, Ireland, Italy, the Netherlands and the United Kingdom	DIAdIC Study: FOCUS + iFOCUS	Patient with advanced cancer and their direct caregiver / family member	Dyadic intervention	12 weeks: iFOCUS: 4 online sessions (30') + FOCUS: 2 home visits (90') + video session 30'	Cognitive behavioural intervention a) Promoting the family process, b) Cognitive restructuring, c) Promoting coping, d) Emotional regulation e) Symptom management, f) Problem-solving training
Johns et al. (2020a) ³³ - USA -	MODEL Care - Mindfully Optimizing Delivery of End-of-Life Care	Adults with metastatic cancer and their caregivers (n=26)	Dyadic intervention	6 sessions weekly (120') + 20'/daily mindfulness sessions	Psychotherapeutic intervention: a) Mindfulness training, b)Interpersonal effectiveness training c)Assertive communication training
Lambert et al. (2021) ³⁴ - Canada -	TIME	Prostate cancer patients and their caregivers	Dyadic intervention	10 Weeks: 5 asynchronous online modules + digital library suggested interval of 2 weeks between modules;	Cognitive behavioural intervention a) Management of physical symptoms, b) Stress management, d) Assertive communication training, e) Problem-solving training, e) Support in the decision-making process
Kim & Yoo (2022) ³⁵ - Correia do Sul -	Advanced practice psycho-educational program led by nurses	Colon Rectal Cancer Survivors (n=39)	Mixed intervention	6 sessions weekly (120') 5 group sessions + 1 individual session	Psychotherapeutic intervention: a) Coping skills training b) Problem-solving training, c) Stress management and emotional regulation
Reb et al. (2020) ³⁶ - USA -	Day By Day (DBD)	Patients with stage III or IV gynecological or lung cancer (n = 31) exhibiting dysfunctional levels of fear of progression or emotional distress	Individual Intervention	8 weeks: 7 videocall/ telephone sessions (1st face-to-face assessment followed by 6 non-face-to-face sessions)	Psychotherapeutic intervention: a)Cognitive restructuring b)Behavior modification c) Relaxation therapy/mindfulness training d)Decision-making support
Johns et al. (2020b) ³⁷ - USA -	Group intervention program based on Acceptance and Commitment Therapy (ACT)	Patient after breast-conserving surgery with fear of cancer recurrence.	Group intervention	6 sessions: 120' weekly + education sessions	Psychotherapeutic intervention: Acceptance and Commitment Therapy (ACT)
Peixoto et al. (2023) ³⁸ - Portugal -	Educational nursing intervention to promote adaptation in survivors	Cancer survivors	Mixed intervention	8 sessions weekly: 60' group sessions (1,3,5,7) + 30' individual or dyadic intervention (2,4,6 e 8)	Psychoeducational Intervention

Summary of Outcomes

Most of the records included in this review were published in 2020 (n=6); 21,24,31,33,36,37 five in 2021; 23,25,30,32,34 three in 2022;^{28,29,35} three in 2019^{22,26,27} and one in 2023³⁸. The USA has the highest prevalence of scientific evidence on this topic (n=6);^{22,25,26,33,36,37} Iran followed with three records (n=3);^{21,23,27} Canada^{28,34} and China^{24,29} with two records each; Taiwan³⁰, Indonesia³¹, South Korea³⁵ and Portugal³⁸ with one record each. In addition to a record involving several countries, Belgium, Denmark, Ireland, Italy, the Netherlands and the United Kingdom.³² In terms of the most commonly employed methodology, randomised clinical trials ranked as the most prevalent (n=7), 23,24,26,28,32,34,37 followed by quasi-experimental studies (n=4), 21,27,31,35 pilot studies (n=3), 25,29,33 experimental studies (n=1),30 systematic literature reviews (n=1),22 mixed studies (n=1)³⁶ and pilot study protocols (n=1).³⁸ A significant number of records included more than one type of cancer (n=8), 21, 22, 25, 26, 32, 33, 36, 38 followed by breast cancer records (n=5), ^{23,27,28,30,37} rectal cancer (n=2), ^{29,35} gynaecological cancer $(n=2)^{24,31}$ and prostate cancer $(n=1)^{.34}$ Most of the records considered intervention in the phase of the disease between initial diagnosis and treatments (n=7),21,23- 25,28,29,34 six focused on the survival phase $(n=6)^{22,26,30,35,37,38}$ and three in the palliative phase (n=3).32,33,36 One of the records considered intervention in both the treatment and survival phases²⁷ and another considered the intervention regardless of the stage of the cancer disease.³¹ The analysed records included population samples of more than 20 participants, with the largest being Chow et al.²⁴, which comprised 202 participants. Regarding interventions and approaches to facilitate coping in adults with cancer, those within the cognitive-behavioural field were particularly emphasised (n=10)^{21-23,25-27,29,30,32,34}. This was followed by programs with exclusive interventions in the psychotherapeutic domain (n=5)31,33,35-37 and in the psychoeducational domain (n=3).24,28,38 Of the coping-promoting psychotherapeutic interventions mentioned, relaxation and mindfulness techniques (n=7)^{22,23,30,31,33,36,37}, promotion of the family processes (n=7)^{25,26,28,29,32-34}, stress management skills training (n=5)^{22,23,34,35,37}, communication skills training (n=5)^{24,28,31,33,34} and the problem-solving technique (n=4)30,32,34,35 were the most emphasised by the scientific community. It was also found that dyadic intervention (user/family member or caregiver) was mentioned in seven records $(n=7)^{25,26,28,29,32-34}$, group interventions in six records (n=6)^{22,23,27,30,31,37}, individual intervention in three (n=3)21,24,36 and the mixed intervention in two (n=2),35,38 The strategies adopted to implement the

nursing interventions were predominantly face-to-face (n=14).^{21–26,29–31,33,35–38} Although four records (n=4) combined face-to-face sessions with follow-up telephone consultations.^{21,24–26} However, two records (n=2) indicated the exclusive use of online sessions as an intervention strategy^{28,34} and two records (n=2) considered both modalities (face-to-face and non-face-to-face).^{29,32} The sharing of educational material and the sending of homework was identified in five records (n=5).^{25,26,27,33,37}

The most used inclusion criteria across the studies were age (18 years or older), a recent cancer diagnosis or undergoing cancer treatment, the ability to understand the local language, and availability to participate in the proposed sessions. In contrast, the exclusion criteria varied across the studies but generally involved medical conditions that could impede active participation in the programme.

Discussion

The variety of methodologies used reflects the complexity of the subject and the need for multidisciplinary approaches.

Cognitive-behavioural interventions appear to be widely supported in the scientific community. According to Hamidian et al.,²⁷ group interventions enhance cognitive and emotional adaptation by fostering discussion, sharing experiences, and restructuring beliefs. Pourfallahi et al.,²¹ argue that individual interventions provide personalized attention and are effective for addressing specific needs and emotional challenges, but they limit peer support, which is crucial for coping. Dyadic interventions, on the other hand, strengthen support and communication within the family context.³⁴ Mixed interventions combine the benefits of the approaches, although they are more complex in terms of operationalisation.

Regarding the setting of interventions, the inclusion of digital methodologies has been noted, offering increased convenience, accessibility, and, when asynchronous, flexibility. ^{28,29,32,34} However, face-to-face interventions allow for more direct interaction, which can facilitate a deeper understanding of individual needs and foster trust and security.

Individual, dyadic, and group interventions, delivered through both face-to-face and online formats, play a crucial role in supporting adults with cancer. Each approach offers distinct advantages and presents unique challenges. The choice of the most suitable strategy should be based on the individual's specific needs and preferences, in conjunction with available resources and logistical support from healthcare professionals.

The literature widely agrees that the phase of the disease between initial diagnosis and treatment is crucial, with homework assignments recognized as an effective strategy for consolidating knowledge and skills during this stage. ^{25,33,34,26}

The recommended number of sessions for a programme that addresses the emotional and psychosocial needs of individuals with cancer generally ranges from 6 to 12 sessions (n = 11).^{23,26,28–30,32,33,35–38}

Regarding session duration, there was greater consensus on durations between 45 and 90 minutes $(n = 9)^{21,23-25,27,29,31,36,38}$ depending on the intervention methodology, depth of content, and planned activities.

In terms of session frequency, the analysed records indicated that weekly interventions were predominant (n = 9). $^{21-23,26,30,33,35,37,38}$

Despite the valuable findings, several limitations should be noted. The diversity of methodologies, the cancer types studied, and the lack of long-term follow-up limit the generalisability of results. Therefore, future research should focus on standardising interventions, assessing long-term effects, and comparing digital with face-to-face approaches on coping.

Conclusions and Implications for Clinical Practice

The results indicate that the scientific community has increasingly developed programmes aimed at facilitating the adaptation and emotional adjustment of patients and their families to cancer. This is largely due to the recognition of the importance of such interventions in optimising the management of emotional and psychosocial challenges associated with the disease, which have both direct and indirect effects on the well-being and quality of life of this population.

A holistic and personalised approach, tailored to individual and contextual needs, remains essential for fostering healthy adaptation to the disease process and improving the quality of life for cancer patients.

Although the results suggest the potential effectiveness of these interventions, it is important to acknowledge the limitations of this review, including the possible exclusion of relevant studies due to the limited selection of databases and the lack of an evaluation of the methodological quality of the included studies.

These findings underscore the ongoing need for further research in this field, with the goal of enhancing nursing interventions and providing more effective support to cancer patients and their caregivers. Mapping the therapeutic interventions implemented by nurses to promote coping in individuals with cancer could serve as a valuable tool to support nursing decision-making and clinical practice. It could also contribute to the development of nursing programmes aimed at promoting coping in adults with cancer, as well as facilitate the dissemination of existing evidence on this subject.

References

- Ferlay J, Ervik M, Lam F, Laversanne M, Colombet M, Mery L, et al. Global Cancer Observatory: Cancer Today. Lyon, France: International Agency for Research on Cancer. Available from: https://gco.iarc.who.int/today [Internet]. Lyon, France: International Agency for Research on Cancer.; 2024 [citado 14 de julho de 2024]. Disponível em: https://gco.iarc.who.int/today
- Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2024;74(3):229–63.
- European Comission. Advancing the Right To Be Forgotten -Stocktaking of Progress and Challenges [Internet]. Conference apresentado na: Cancer Survivorship; 2024 mai; Brussels, Belgium. Disponível em: https://health.ec.europa.eu/events/cancersurvivorship-advancing-right-be-forgotten-2024-05-14_en
- Kissane D. Beyond the psychotherapy and survival debate: the challenge of social disparity, depression and treatment adherence in psychosocial cancer care. Psychooncology. 2009 Jan;18(1):1–5.
- Alsughayer LY, Altamimi LA, Alsaleh FS, Alsaghan L, Alfurayh I, Abdel-Aziz NM, et al. Prevalence and determinants of distress among oncology patients at a tertiary care medical city in Riyadh, Saudi Arabia. Saudi Med J. 2021 Jul;42(7):761–8.
- Peters L, Brederecke J, Franzke A, de Zwaan M, Zimmermann T. Psychological Distress in a Sample of Inpatients With Mixed Cancer-A Cross-Sectional Study of Routine Clinical Data. Front Psychol. 2020:11:591771.
- Harami RV, Ghorbani A, Ghaffariyan S, Asgari N, Akbari M, Ranjbaran F, et al. Psychological and psychiatric issues in patients diagnosed with cancer: A review study. J Prev 2023 Dec 29;9(1):e35238– e35238.
- Niedzwiedz CL, Knifton L, Robb KA, Katikireddi SV, Smith DJ. Depression and anxiety among people living with and beyond cancer: a growing clinical and research priority. BMC Cancer. 2019 Dec; (1):1–8.
- Nikbakhsh N, Moudi S, Abbasian S, Khafri S. Prevalence of depression and anxiety among cancer patients. Casp J Intern Med. 2014 Summer:5(3):167.
- Caruso R, Nanni MG, Riba MB, Sabato S, Grassi L. The burden of psychosocial morbidity related to cancer: patient and family issues. Int Rev Psychiatry Abingdon Engl. 2017 Oct;29(5):389–402.
- Van Beek FE, Jansen F, Mak L, Lissenberg-Witte BI, Buter J, Vergeer MR, et al. The course of symptoms of anxiety and depression from time of diagnosis up to 2 years follow-up in head and neck cancer patients treated with primary (chemo) radiation. Oral Oncol. 2020 Mar;102:104576.
- Wang X, Wang N, Zhong L, Wang S, Zheng Y, Yang B, et al. Prognostic value of depression and anxiety on breast cancer recurrence and mortality: a systematic review and meta-analysis of 282,203 patients. Mol Psychiatry. 2020 Dec;25(12):3186–97.
- Grassi L, Caruso R, Riba MB, Lloyd-Williams M, Kissane D, Rodin G, et al. Anxiety and depression in adult cancer patients: ESMO Clinical Practice Guideline†. ESMO Open [Internet]. 2023 Apr 1; [citado 30 de julho de 2024];8(2). Disponível em: https://www.esmoopen. com/article/52059-7029(23)00375-7/abstract

- Riba MB, Donovan KA, Ahmed K, Andersen B, Braun Ii, Breitbart WS, et al. NCCN Guidelines® Insights: Distress Management, Version 2.2023: Featured Updates to the NCCN Guidelines. J Natl Compr Canc Netw. 2023 May 1; 21(5):450–7.
- Holland JC, Alici Y. Management of distress in cancer patients. J Support Oncol. 2010;8(1):4–12.
- Greally H, Love D, Mullen L. HSE.ie. 2020 [citado 18 de maio de 2024]. Hospital and Community-based Psychosocial Care for Patients with Cancer and their Families: A Model of Care for Psycho-Oncology. Disponível em: https://www.hse.ie/eng/services/list/5/ cancer/profinfo/psycho-oncology-programme/model%20of%20
- Holland JC, Lazenby M, Loscalzo MJ. Was There a Patient in Your Clinic Today Who Was Distressed? J Natl Compr Cancer Netw JNCCN. 2015 Sept;13(9):1054–6.
- Jacobsen PB, Jim HS. Psychosocial interventions for anxiety and depression in adult cancer patients: achievements and challenges. CA Cancer J Clin. 2008;58(4):214–30.
- Karam M, Chouinard MC, Poitras ME, Couturier Y, Vedel I, Grgurevic N, Hudon C. Nursing care coordination for patients with complex needs in primary healthcare: a scoping review. Int J Integr Care. 2021 Mar 19;21(1):16. doi: 10.5334/ijic.5518. PMID: 33776605; PMCID: PMC7977020.
- Pourfallahi M, Gholami M, Tarrahi MJ, Toulabi T, Kordestani Moghadam P. The effect of informational-emotional support program on illness perceptions and emotional coping of cancer patients undergoing chemotherapy. Support Care Cancer Off J Multinatl Assoc Support Care Cancer. 2020;28(2):485–95.
- Sowada KM. Qigong: Benefits for Survivors Coping With Cancer-Related Fatique. Clin J Oncol Nurs. 2019;23(5):465–9.
- Samami E, Elyasi F, Mousavinasab SN, Shojaee L, Zaboli E, Shahhosseini Z. The effect of a supportive program on coping strategies and stress in women diagnosed with breast cancer: A randomized controlled clinical trial. Nurs Open. 2021;8(3):1157– 67.
- Chow KM, Chan CWH, Choi KC, Siu KY, Fung HKS, Sum WM. A theory-driven psycho-educational intervention programme for gynaecological cancer patients during treatment trajectory: A randomised controlled trial. Psychooncology. 2020;29(2):437–43.
- Chen HL, Annie Kao TS, Reuille KM, Northouse L. FOCUS Program: Treating Patients With Cancer and Family Caregivers as a Unit of Care. Clin J Oncol Nurs. 2021;25(3):E17–25.
- Pace TWW, Dodds SE, Sikorskii A, Badger TA, Segrin C, Negi LT, et al. Cognitively-Based Compassion Training versus cancer health education to improve health-related quality of life in survivors of solid tumor cancers and their informal caregivers: study protocol for a randomized controlled pilot trial. Trials. 2019;20(1):247.
- Hamidian P, Rezaee N, Shakiba M, Navidian A. The Effect of Cognitive-Emotional Training on Post-traumatic Growth in Women with Breast Cancer in Middle East. J Clin Psychol Med Settings. 2019;26(1):25–32.
- Fergus K, Tanen A, Ahmad S, Gardner S, Warner E, McLeod D, et al. Treatment Satisfaction With Couplelinks Online Intervention to Promote Dyadic Coping in Young Couples Affected by Breast Cancer. Front Psychol. 2022;13:862555.
- Chen M, Gong J, Cao Q, Li Q. The development and evaluation of a web-based complex intervention: The caring for couples coping with colorectal cancer «4Cs: CRC» program. Asia-Pac J Oncol Nurs. 2022;9(5):100050.
- Lai HL, Chen CI, Lu CY, Huang CY. Cognitive Behavioural Therapy plus Coping Management for Depression and Anxiety on Improving Sleep Quality and Health for Patients with Breast Cancer. Brain Sci [Internet]. 2021;11(12). Disponível em: https://search.ebscohost. com/login.aspx?direct=true&db=mdc&AN=34942916&lang= pt-pt&site=ehost-live
- Nasution LA, Afiyanti Y, Kurniawati W. Effectiveness of Spiritual Intervention toward Coping and Spiritual Well-being on Patients with Gynecological Cancer. Asia-Pac J Oncol Nurs. 2020;7(3):273–9.

- 31. Matthys O, De Vleminck A, Dierickx S, Deliens L, Van Goethem V, Lapeire L, et al. Effectiveness of a nurse-delivered (FOCUS+) and a web-based (iFOCUS) psychoeducational intervention for people with advanced cancer and their family caregivers (DIAdIC): study protocol for an international randomized controlled trial. BMC Palliat Care. 2021;20(1):193.
- Johns SA, Beck-Coon K, Stutz PV, Talib TL, Chinh K, Cottingham AH, et al. Mindfulness Training Supports Quality of Life and Advance Care Planning in Adults With Metastatic Cancer and Their Caregivers: Results of a Pilot Study. Am J Hosp Palliat Care. 2020;37(2):88–99.
- Lambert SD, Duncan LR, Ellis J, Robinson JW, Sears C, Culos-Reed N, et al. A study protocol for a multicenter randomized pilot trial of a dyadic, tailored, web-based, psychosocial, and physical activity self-management program (TEMPO) for men with prostate cancer and their caregivers. Pilot Feasibility Stud. 2021;7(1):78.
- Kim HK, Yoo YS. [Effects of the Advanced Practice Nurse-Led Psychoeducational Program for Colorectal Cancer Survivors]. J Korean Acad Nurs. 2022;52(3):245–60.
- Reb AM, Borneman T, Economou D, Cangin MA, Cope DG, Ma H, et al.
 A nurse-led intervention for fear of cancer progression in advanced cancer: A pilot feasibility study. Eur J Oncol Nurs Off J Eur Oncol Nurs Soc. 2020;49:101855.
- Johns, Stutz, Talib, Cohee, Beck-Coon, Brown LF, et al. Acceptance and commitment therapy for breast cancer survivors with fear of cancer recurrence: A 3-arm pilot randomized controlled trial. Cancer. 2020;126(1):211–8.
- Peixoto TADSM, dos Santos Martins Peixoto NM, Santos Pinto CA, Vilaça de Brito Santos CS. Intervenção Educacional Em Enfermagem Para Promover a Adaptação Nos Sobreviventes De Câncer: Protocolo Para Estudo-Piloto: Cogitare Enfermagem. Cogitare Enferm. janeiro de 2023:28:1–15.
- Reb, Borneman, Economou, Cangin, Patel, Sharpe, et al. Fear of Cancer Progression: Findings From Case Studies and a Nurse-Led Intervention. Clin J Oncol Nurs. 2020;24(4):400–8.
- Peters M, Godfrey C, Mcinerney P, Munn Z, Trico A, Khalil H. Scoping Reviews. Em: JBI Manual for Evidence Synthesis [Internet]. 2024.a ed. JBI; 2024. Disponível em: https://synthesismanual.jbi.global.

Financiamento

Sem financiamento.

Aprovação pela Comissão de Ética

Não careceu de aprovação pela comissão de ética.

Conflito de Interesses

Os autores declaram não existir conflito de interesses.