

THE IMPORTANCE OF PALLIATIVE CARE IN THE TREATMENT OF PATIENTS WITH BREAST CANCER: A LITERATURE REVIEW

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Abstract: Palliative care is a practice implemented within the scope of health care, aimed at individuals in intense suffering due to a life-threatening disease, such as breast cancer. Their purpose is to provide relief from the suffering experienced by the patient. The objective of this review was to analyze and expose the demands pertinent to palliative care for patients diagnosed with breast cancer. A search for studies was carried out on the United States National Library of Medicine (PubMed) and Virtual Health Library (VHL) platforms, and a total of 27 scientific articles were included after applying inclusion and exclusion criteria. The results indicate that palliative care is extremely relevant, contributing to the relief of symptoms caused by breast cancer and its treatment, with emphasis on pain as the strongest predictor of quality of life and as a significant impact on the performance of daily activities. Such care should be implemented early, for patients, family members, and companions. In conclusion, health professionals must be aware of the benefits of palliative care and offer it early to breast cancer patients.

Keywords: Palliative care; Breast cancer.

INTRODUCTION

Breast cancer (BC) is the most common neoplasm in women worldwide, accounting for 20% of all cancer cases in women.¹ Its biological complexity, diversity of clinical manifestations, and the significant impact it has on both the physical and emotional conditions of patients make it one of the main challenges faced by the medical community.²

Among the group of patients diagnosed with cancer, it is observed that 15% of deaths are due to BC. However, as new information emerges and therapies evolve, there has been an increase in the life expectancy of patients with BC. This, in turn, highlights the need to offer effective end-of-life care, aiming to

minimize suffering, as well as reduce the impact on life, resulting from both the disease and its therapeutic modalities.^{3,4}

Palliative care (PC) is implemented within the scope of health care as a holistic form of care aimed at individuals in intense suffering due to a life-threatening illness. This approach should be multidisciplinary, aimed at patients facing serious, chronic, or terminal illnesses, aiming to promote a better quality of life and alleviate physical or emotional suffering.⁵

The ideal scenario involves the early introduction of PC, from the moment of diagnosis of the disease, with the availability of this care for both the patient and their family members.⁶

PC is guided not by the pursuit of prolonging life at all costs, but rather by the purpose of enabling patients faced with life-threatening ephemerality, such as BC, to live with dignity and comfort. This comprehensive approach presupposes the collaboration of a multidisciplinary team, composed of professionals from various areas, including physicians, nurses, psychologists, physical therapists, nutritionists, and spiritual counselors.⁷

In this context, the patient is recognized as a holistic being, being evaluated as a whole, not limited to his/her illness. This broad perspective on the individual enables the implementation of therapeutic methods that go beyond the traditional ones for BC, aiming to provide relief from the suffering experienced by the patient.⁸

Despite the importance of PC, Brazil does not have a good quality of life at the end of life, ranking 79th out of 81 countries analyzed. This scenario highlights the limited availability of access to PC in the country, especially when it comes to the early implementation of this therapeutic approach.⁹

However, until this study, little has been discussed about the need to disseminate the benefits of PC and encourage its

implementation in the early stages of breast cancer.¹⁰ Considering the reality presented, this study is a literature review to analyze and expose the demands pertinent to palliative care for patients diagnosed with breast cancer.

METHODOLOGY

The methodological approach proposes a compilation of research studies with a qualitative and descriptive approach of an integrative literature review.

The data were collected in Virtual Databases. For this purpose, the National Library of Medicine (PubMed) and the Virtual Health Library (BVS) were used.

The search for articles was carried out considering the descriptors “Palliative Care” and “Breast Neoplasms”, using the Boolean operator “AND”. The descriptors cited were used only in the English language and are found in the Health Science Descriptors (DeCS).

The literature review was carried out with the following steps: establishing the theme; defining the eligibility parameters; setting the inclusion and exclusion criteria; checking the publications in the databases; examining the information found; analyzing the studies found and presenting the results.

The study included articles published from 2018 to 2023; controlled clinical trials; articles within the objective of the study of palliative care in breast cancer. Articles that did not have a theoretical and thematic basis aligned with the objects of the study and duplicates were excluded.

RESULTS

The search retrieved 5,901 studies. A total of 3,222 articles were found in the PubMed database and 2,679 in the BVS database. After applying the inclusion and exclusion criteria, 19 articles were selected from the PubMed database and 8 from the BVS database, totaling 27 articles for the study, as illustrated in **Figure 1**.

After systematically reading the 27 studies that comprised the corpus of the study, a comparative box was built consisting of author, year of publication, article title, type of study, age of patients, cancer staging, and main conclusions (**Box 1**).

The 27 selected studies were controlled clinical trials, and only 3 studies were not randomized controlled clinical trials. The studies presented a variable sample, ranging from 18 to 12,375 participants.

The age range of the participants in the studies varied. Out of 27 studies, 6 had an initial age of 18 years, 1 had an initial age of 21 years, 3 had an average age of 50 years, 1 had participants over 50 years old, 1 had an average age of 55 years, 1 had an average age of 64 years, 1 had an average age of 65 years, 1 had participants over 65 years old, 1 had an average age of 68 years, 1 had an average age of 69 years, with an overall average age of 51 years among the studies. Additionally, 7 out of the 27 studies did not have established age range criteria.

In addition to the age range, the BI-RADS classification was used to classify the stage of cancer. Of the 27 studies, 25.9% of patients were in stage I-III, 14.8% were in stage III-IV, and 33.3% had metastatic cancer; 1 study used newly diagnosed cancer as a criterion, 1 study used incurable cancer as a criterion, and 1 study used being on chemotherapy as a criterion.

Of the 27 selected articles, 22 proved the benefits of PC and the others did not deny it. Three studies advocated early PC, however, another study proved that despite the benefits of PC, its provision is still scarce, mainly in elderly patients, hospitalized, and outside of large centers.

Twenty-two articles proved relief of physical and emotional symptoms with non-pharmacological approaches. Of these, 3 studies analyzed the relationship between physical exercise and the deleterious symptoms of the disease, where 2 proved that physical activity helps to combat the deleterious symptoms of BC and the side effects of treatment, and 1 proved the effectiveness of the combination of Dexamethasone and physical activity for cancer-related fatigue.

Regarding bone metastasis in BC, 3 studies confirmed pain relief when using short-cycle palliative radiotherapy at the end of life, and pain reduction when adding radiopharmaceuticals to the bisphosphonate, but showing no difference between stereotactic body radiotherapy and conventional three-dimensional conformal radiotherapy.

DISCUSSION

Our results highlighted the relevance of PC in the management of emotional and physical symptoms manifested by patients with BC, their families, and caregivers. Patients who had access to PC since diagnosis received less intensive treatments, consistent with their wishes, providing a better quality of life and better end-of-life care. With the advancement of treatment, patients with BC have shown improved survival, reaffirming the relevance of the early introduction of PC. However, studies show that a significant portion of patients do not have their needs met, especially elderly and hospitalized patients, as emphasized in one of the studies.^{11,30}

In this context, physicians are reluctant to discuss PC with patients, contributing to a gap in meeting the needs of these individuals. This reluctance is often motivated by health professionals' concerns about the possible distress and hopelessness that patients could experience when discussing PC-related topics. This hesitation, in turn, results in the postponement of care planning, directly impacting the quality of care provided.¹²

Therefore, there is no dissemination of information about PC among patients, family members, and caregivers. This lack of knowledge directly impacts the ability of these individuals to play an active role in disease care. It is important to emphasize that active participation is extremely important, as it is correlated with increased autonomy in coping with cancer, improved adherence to treatment, obtaining more promising prognoses, and reducing anxiety and depression, symptoms commonly present in patients with BC.¹⁴

Regarding the active role of the patient, three studies used mobile applications to contribute to care planning. "Oncokompas", "BENECa mHealth" and "Strong together", all demonstrated improvements in self-management, achieving improvements in the choice of ideal and individual PC, improvements in cognitive, psychological, and functional performance, and better self-defense in the face of challenges the disease brings.^{15,21,31}

However, despite the stigma associated with PC by some physicians, studies show that the early introduction of PC not only maintains but also increases patients' hope. This evidence provides a solid basis for encouraging healthcare professionals to initiate conversations about PC early. By promoting this proactive approach, clinicians have the opportunity to reduce late referrals, enabling more effective management of patients' conditions. Furthermore, by addressing the stigmas associated with PC,

healthcare professionals can contribute to a paradigm shift, emphasizing that PC aims to improve quality of life, provide comprehensive support, and respect patients' individual preferences regarding their health care in coping with their illness. This evidence-informed approach can thus contribute to a more patient-centered and compassionate medical practice.^{13,16}

BC is the most prevalent diagnosis and the main cause of cancer mortality in women, demanding interventions that not only combat the disease but also improve quality of life.¹⁸ In this context, approximately 38% of women diagnosed annually with BC are in the advanced stages of the disease, often presenting manifestations of a wide range of debilitating symptoms, including pain, fatigue, and the occurrence of metastases.^{17,19}

Studies have shown that pain is the strongest predictor of quality of life and a symptom that significantly impacts the performance of daily activities. In the specific context of advanced BC, 30% to 40% of survivors experience persistent post-surgery pain. Due to the impact this symptom causes, studies have revealed that holistic treatments such as Qigong mind-body exercises have allowed the mind and body to reconnect, thus reducing pain.^{21,22} On the other hand, one study stated that progressive resistance training does not reduce persistent pain after axillary dissection.²³

Fatigue in patients with advanced BC represents a significant challenge, manifesting itself not only more intensely but also more frequently. There is a close correlation between intense fatigue and several adverse outcomes, including lower quality of life, challenges in functional performance, increased frailty, and a significant reduction in survival. Studies have demonstrated the effectiveness of implementing physical exercise associated with Dexamethasone, art therapy, and somatic

acupressure in the treatment of BC with the intention of reducing fatigue.^{20, 24, 26}

In BC metastases, the bone is often affected, manifesting with intense pain and substantial limitations. Studies corroborate the efficacy of palliative radiotherapy, demonstrating its potential to provide complete pain relief in up to 50% of patients. In addition, adding radiopharmaceuticals to the bisphosphonate can reduce pain within one month.^{27,29} Nevertheless, in painful metastases in the spine, a study showed that there was no change in the quality of life, fatigue, or emotional distress with the use of stereotactic body radiotherapy compared to conventional three-dimensional conformal radiotherapy.³²

Another important issue in the field of PC involves the side effects caused by chemotherapy, which require special attention since they can contribute to low patient adherence to treatment. According to studies, approximately 86% of patients undergoing chemotherapy experience adverse effects, including nausea, vomiting, alopecia, anorexia, stomatitis, diarrhea, fatigue, and insomnia. Thus, studies have analyzed that the implementation of mindfulness relaxation and relaxing music promoted a significant reduction in the occurrence of nausea and vomiting during the course of treatment and that Tibetan yoga helps improve sleep quality, contributing to a more tolerable and effective experience for patients.^{25,28}

Furthermore, one study demonstrated that there is no consensus in the literature on survival after the psychosocial intervention, and another study stated that adjuvant supportive group therapy upon diagnosis does not prolong life by five years in BC.^{33,34}

CONCLUSION

Therefore, given the debilitating symptoms associated with BC, the need to associate PC early with curative treatment becomes evident. To this end, however, professionals must be trained about the relevance and benefits of implementing this care, so that they can provide it to patients appropriately. In this way,

several benefits can be verified, such as the reduction of pain and fatigue, intervention in psychological aspects, improvement in quality of life, and patient satisfaction. In addition, the inclusion of patients in decision-making, increased survival and comprehensive support for patients, family members, and companions are tangible benefits of this early implemented approach.

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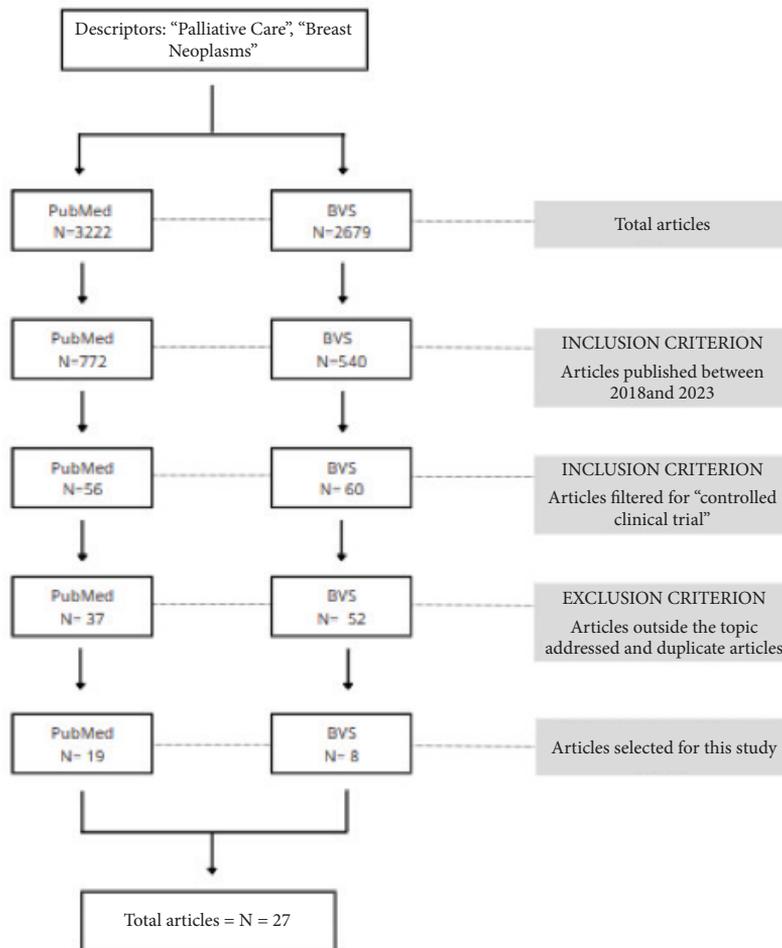


Figure 1: Flowchart of article selection.

Source: Prepared by the authors (2023)

Author	Year	Title	Type of Study	Age	Cancer staging	Main conclusions
Bidstrup PE., et al.	2023	Effect of a Nurse Navigation Intervention on Mental Symptoms in Patients With Psychological Vulnerability and Breast Cancer: The REBECCA Randomized Clinical Trial	Randomized controlled clinical trial (N=309)	Average age of 55 years	Newly diagnosed and suffering from psychological distress	The “REBECCA” intervention improved depression and health-related quality of life.
Thomas TH., et al.	2023	“I was never one of those people who just jumped right in for me”: patient perspectives on self-advocacy training for women with advanced cancer.	Randomized controlled clinical trial (N=40)	Over 18 years old	Stage IV	Patients who played the game “Strong Together” improved their self-defense in the face of the challenges that cancer brings.
Lozano-Lozano M., et al.	2023	Effect of mHealth plus occupational therapy on cognitive function, mood and physical function in people after cancer: Secondary analysis of a randomized controlled trial	Randomized controlled clinical trial (N=80)	Between 25 and 75 years	Stage I to IIIA	The use of the “BENECA mHealth” application combined with occupational therapy improved cognitive, psychological, and functional performance.

Kirkegaard AM., et al.	2023	Effects on long-term survival of psychosocial group intervention in early-stage breast cancer: follow-up of a randomized controlled trial	Randomized controlled clinical trial (N=201)	Between 18 and 70 years	Stage I to IIIA	It was neither possible to confirm nor deny the improvement in survival after psychosocial intervention.
Schulman-Green D., et al.	2023	Integrating Palliative Care Into Self-management of Breast Cancer: A Pilot Randomized Controlled Trial	Randomized controlled clinical trial (N=71)	Average age of 50 years	Stage III or IV	Patients who used the "Managing Cancer Care" personal guide demonstrated that the integration of palliative care into cancer treatment can help in the creation of self-management plans and can improve anxiety and depression.
Cohen MG., et al	2022	Hope and advance care planning in advanced cancer: Is there a relationship?	Randomized controlled clinical trial (N=672)	Average age of 69 years	Metastatic cancer	Having an advance care plan for patients with advanced cancer does not make them lose hope, and may even increase it.
Chvetzoff G., et al.	2022	Impact of early palliative care on additional line of chemotherapy in metastatic breast cancer patients: results from the randomized study OSS	Randomized controlled clinical trial (N= 98)	Over 18 years old	Metastatic cancer	Patients who received early palliative care had relief from deterioration in physical functioning and improved communication.
Nipp RD., et al.	2022	Effect of a Symptom Monitoring Intervention for Patients Hospitalized With Advanced Cancer: A Randomized Clinical Trial	Randomized clinical trial (N=321)	Average age of 64 years	Advanced cancer and hospitalizations	Symptom monitoring in hospitalized patients with advanced cancer did not have a significant effect on symptoms or healthcare use and should not be done routinely.
Greer JÁ., et al	2022	Randomized Trial of a Palliative Care Intervention to Improve End-of-Life Care Discussions in Patients With Metastatic Breast Cancer	Randomized controlled clinical trial (N=120)	Over 50 years old	Metastatic cancer	Patients who received palliative care received better end-of-life care and improved quality of life.
Hiensch AE., et al.	2022	Design of a multinational randomized controlled trial to assess the effects of structured and individualized exercise in patients with metastatic breast cancer on fatigue and quality of life: the EFFECT study.	Randomized controlled clinical trial (N= 350)	Over 18 years old	Metastatic cancer	Physical exercise during and after cancer treatment minimizes side effects that impair quality of life.
Wang T., et al.	2022	Implementing an evidence-based somatic acupressure intervention in breast cancer survivors with the symptom cluster of fatigue, sleep disturbance and depression: study protocol of a phase II randomised controlled trial.	Randomized controlled clinical trial (N=51)	No age criteria	Cured of breast cancer stages I to IIIA	Somatic acupressure reduced fatigue, depression, and sleep disturbances.
Hausner D., et al.	2021	Timing of Palliative Care Referral Before and After Evidence from Trials Supporting Early Palliative Care.	Randomized controlled clinical trial (N=860)	Average age of 64 years	Stage IV or III with a bad prognosis	It encouraged oncologists to refer cancer patients earlier to early palliative care to improve quality of life and reduce the severity of symptoms.

Yennurajalingam S., et al.	2021	Combination Therapy of Physical Activity and Dexamethasone for Cancer-Related Fatigue: A Phase II Randomized Double-Blind Controlled Trial	Randomized controlled clinical trial (N=60)	Average age of 50 years	Metastatic cancer	Patients on physical activity combined with Dexamethasone therapy had improvement in cancer-related fatigue.
Ye ZJ., et al.	2020	Effectiveness of adjuvant supportive-expressive group therapy for breast cancer	Randomized clinical trial (N= 3,327)	No age criteria	With breast cancer who received or not SEG	Adjuvant supportive therapy upon diagnosis does not prolong 5-year survival in breast cancer.
Sikorskii A., et al.	2020	Symptom response analysis of a randomized controlled trial of reflexology for symptom management among women with advanced breast cancer	Randomized controlled clinical trial (N=256)	Over 21 years old	Stage III or IV	Home reflexology provided pain relief.
Frasca M., et al.	2020	Palliative care delivery according to age in 12,000 women with metastatic breast cancer: Analysis in the multicentre ESME-M-BC cohort 2008-2016.	Randomized controlled clinical trial (N=12,375)	Average age of 65 years	Metastatic cancer	There is a need to expand palliative care for hospitalized patients and the elderly.
Ammitzbøll G., et al.	2020	Effect of progressive resistance training on persistent pain after axillary dissection in breast cancer: a randomized controlled trial	Randomized controlled clinical trial (N=158)	No age criteria	Metastatic cancer	Patients with persistent pain after axillary dissection for breast cancer had no change in persistent pain after progressive resistance training.
Osypiuk K., et al.	2020	“Making Peace with Our Bodies”: A Qualitative Analysis of Breast Cancer Survivors’ Experiences with Qigong Mind-Body Exercise	Randomized controlled clinical trial (N=18)	Average age of 55 years	Stage 0 to III	Qigong mind-body exercise allows to reconnect mind and body and reduce pain.
Hunter JJ., et al.	2020	A randomized trial of nurse-administered behavioral interventions to manage anticipatory nausea and vomiting in chemotherapy	Randomized clinical trial (N= 474)	No age criteria	Undergoing chemotherapy	Behavioral interventions reduce chemotherapy side effects that decrease quality of life and can lead to treatment delays.
Teo I., et al.	2020	A feasible and acceptable multicultural psychosocial intervention targeting symptom management in the context of advanced breast cancer	Randomized controlled clinical trial (N=85)	No age criteria	Metastatic cancer	Psychosocial intervention of cognitive-behavioral strategies, mindfulness, and value-based activity improved anxiety, depression, and fatigue.
Czamanski-Cohen J., et al.	2019	The role of emotional processing in art therapy (RE-PAT) for breast cancer patients	Randomized controlled clinical trial (N=20)	No age criteria	After primary treatment	Art therapy reduces psychological and physical symptoms and reduces depression and somatic symptoms.
Schuit AS., et al.	2019	Efficacy and cost-utility of the eHealth application ‘Oncokompas’, supporting patients with incurable cancer in finding optimal palliative care, tailored to their quality of life and personal preferences: a study protocol of a randomized controlled trial.	Randomized controlled clinical trial (N=136)	Over 18 years old	Incurable cancer	The “Oncokompas” application contributed to advance care planning, improved self-management, and helped in choosing the ideal and individual palliative care for each patient.

Wallace AS., et al.	2018	Choosing Wisely at the End of Life: Use of Shorter Courses of Palliative Radiation Therapy for Bone Metastasis.	Randomized controlled clinical trial (N=569)	Over 65 years old	Metastatic cancer	Patients with bone metastases obtained pain relief when using short-cycle palliative radiotherapy at the end of life.
Seider MJ., et al.	2018	Randomized phase III trial to evaluate radiopharmaceuticals and zoledronic acid in the palliation of osteoblastic metastases from lung, breast, and prostate cancer: report of the NRG Oncology RTOG 0517 trial.	Randomized controlled clinical trial (N=261)	Average age of 68 years	Metastatic cancer	Patients with bone metastases obtained pain reduction within one month when adding radiopharmaceuticals to bisphosphonate.
Sprave T., et al.	2018	Quality of Life Following Stereotactic Body Radiotherapy Versus Three-Dimensional Conformal Radiotherapy for Vertebral Metastases: Secondary Analysis of an Exploratory Phase II Randomized Trial	Randomized controlled clinical trial (N=55)	Between 18 and 80 years	Metastatic cancer	There was no change in the quality of life, fatigue, or emotional distress with the palliative care of patients with painful spinal metastases after stereotactic body radiotherapy versus conventional three-dimensional conformal radiotherapy.
Rabow M., et al.	2018	The value of embedding: integrated palliative care for patients with metastatic breast cancer	Randomized controlled clinical trial (N= 105)	No age criteria	Metastatic cancer	Early palliative care increased early referrals and improved end-of-life care, reducing patient suffering and system costs.
Chaoul A., et al.	2018	Randomized trial of Tibetan yoga in patients with breast cancer undergoing chemotherapy	Randomized controlled clinical trial (N=227)	Average age of 50 years	Stage I to III	Chemotherapy patients who did Tibetan yoga had benefits in sleep quality.

Box 1: Characterization of articles according to authors, year of publication, article title, type of study, age of individuals, characteristics of individuals, and main conclusions.

Source: Prepared by the authors (2023)