ISSN. 2338-7475
E-ISSN. 2620-7869
Hearty
Jurnal Kesehatan Masyarakat
Beriman, Tulus, Sepenuh Hati,Berbesar Hati, Jujur, Sehat dan Kuat

Vol. 14 No. 1, Februari 2026, Hal. 86-102

BENEFITS OF COMPLEMENTARY THERAPY THROUGH TELEMEDICINE SUPPORT IN PALLIATIVE CARE OF BREAST CANCER: SYNERGY OF PAIN MANAGEMENT AND PSYCHOLOGICAL SUPPORT ON QUALITY OF LIFE

Abdul Khamid, Ida Susanti *, Dinda Putri Maulidia, Eka Novia Noor Safitri, Calista Kheisha Nabilla, Aulia Ningtias Rahma Febrianti, Feri Firmansah, Alisha Rahmadina, Hasipah Nurseha, Elsya Ayu Mustika Ramadhan
Faculty of Nursing, Sekolah Tinggi Ilmu Kesehatan Abdi Nusantara
Jl. Swadaya No.7, RT.001/RW.014, Jatibening, Pd. Gede District, Bks City, West Java 17412, Indonesia
Email: idasusanti2004@gmail.com

Abstract

Benefits of Complementary Therapy in Palliative Care for Breast Cancer: The Synergy of Pain Management & Psychological Support for Quality of Life Breast cancer is the most generic type of cancer in women, using significant impact on the physical, psychological, and social aspects of the patient. Holistic palliative care, including complementary therapy, is serious about improving the patient's quality of life through pain management and psychological support. This study aims to evaluate the effectiveness of complementary therapies such as acupuncture, yoga, and music therapy in reducing pain and enhancing the psychological well-being of breast cancer patients. This systematic review uses PRISMA guidelines, covering studies published between 2020–2024. The results showed that complementary therapies significantly helped reduce the intensity of pain, anxiety, & depression, and improve overall quality of life. The integration of complementary approaches to palliative care can lead to.

Keywords: Palliative Care, Therapy, Quality of life, Telemedicine, Pain Management, Psychological

Introduction

Breast cancer is the most common type of malignant tumor in women. This disease develops due to the growth of abnormal cells in the breast tissue that can spread to other parts of the body if not treated properly. Treatment involves a variety of comprehensive therapies such as surgery, chemotherapy, radiotherapy, and endocrine therapy. In addition to physical impacts such as impaired body function and side effects of treatment, breast cancer also causes psychological stress, including anxiety and depression, which can affect the patient's quality of life. Therefore, a holistic approach is needed to effectively manage the impact of this disease.

Purpose: The aim of this study was to explore the benefits of complementary therapies in palliative care for breast cancer patients, with a focus on the synergy between pain management and psychological support in improving patients' quality of life. Breast cancer, as one of the most common cancers among women, is often accompanied by chronic pain and significant psychological problems, including anxiety and depression. This study aims to evaluate various complementary therapy approaches, such as acupuncture, meditation, and art therapy, and their effects on pain reduction and improving patients' psychological well-being. By understanding the effectiveness of complementary therapies in the context of palliative care, this study is expected to provide valuable insights for the development of more holistic and integrated care strategies for breast cancer patients.

Methods: Search Strategy: A comprehensive literature search was conducted in multiple

Submitted: December-2024 Received: June-2025 Available Online: February-2026

databases including Scince Direct, PubMed, Emerald for studies published between 2020 and 2024. Keywords used included “Pain Management”, “Palliative Care”, “Therapy”, “Telemedicine”, “Quality of life”, and “Psychological”. Eligibility criteria were (1) P: Participants were patients with BCRL or at risk of BCRL; (2) I: Intervention was yoga; (3) O: Outcome of BCRL; and (4) S: Studies were randomized controlled trials (RCTs) or quasi-experimental studies. review articles and expert opinion articles. Study Selection Based on abstract review, when articles appeared to meet the inclusion criteria we obtained the full manuscript and independently reviewed it.

Results: Paint Management ensures patients feel more comfortable with a combination of medical and complementary therapies such as music therapy and yoga, in Palliative Care supports patients physically, emotionally and psychologically during the difficult stages of the disease, the use of Telemedicine provides easy access to unlimited health services, education and psychological support, in addition Quality of Life helps maintain and improve the patient's sense of control over their treatment and well-being, and can address the anxiety, depression or stress that often accompany breast cancer diagnosis and treatment Psychological Support.

Conclusion: This study shows that complementary therapies in palliative care for breast cancer patients significantly improve pain management and quality of life. The integration of these approaches not only helps in reducing physical pain, but also provides important psychological support for patients, contributing to their emotional and social well-being. Thus, the application of complementary therapies in the context of palliative care may be an effective strategy to improve the quality of life of breast cancer patients, as well as providing a more holistic approach to pain management and psychological support. These results support the importance of developing care programs that combine complementary therapies and psychological support, and demonstrate the potential of telemedicine in providing better access to these interventions, especially for patients facing geographic or mobility barriers.

Background

Breast cancer is a significant global health problem, especially among women. According to data from the World Health Organization (WHO), breast cancer accounts for about 25% of all cancer cases diagnosed in women. Globally, there are about 2.3 million new cases of breast cancer each year, making it the most common type of cancer in the world. In addition, breast cancer causes about 685,000 deaths, or 6.9% of total cancer deaths (WHO, 2021; GLOBOCAN, 2020).

This disease occurs due to the growth of abnormal cells in breast tissue that can form malignant tumors. These cancer cells can develop from milk ducts (ducts) or milk-producing glands (lobule) and spread to other organs if left untreated. The most common types of breast cancer are invasive ductal carcinoma and invasive lobular carcinoma. The development of this cancer not only causes physical impacts in the form of tissue damage, but also has a major impact on the psychological, social, and quality of life aspects of patients (American Cancer Society, 2022).

Several risk factors have been identified as triggers for the development of breast cancer. Biological risk factors, such as advancing age, a family history of breast cancer, and certain genetic mutations increase a person's chances of developing the disease. Hormonal factors, including long-term exposure to estrogen due to early menstruation, late menopause, or postmenopausal hormone therapy, also play a significant role. In addition, lifestyle factors, such as unhealthy diet, lack of physical activity, alcohol consumption, and obesity, contribute to the risk of breast cancer (Pimentel-Parra et al., 2023).

Although the incidence of breast cancer continues to rise, there have been significant advances in early detection and treatment. Mammography screening programs have made it possible to diagnose breast cancer at an early stage, greatly increasing the chances of successful treatment. In addition, the development of targeted therapies, such as hormone therapy, immunotherapy, and molecular-based chemotherapy, has given patients hope for longer survival. The five-year relative survival rate for breast cancer patients now ranges from 88.2% to 96.6%, depending on the stage of diagnosis and access to health care (GLOBOCAN, 2020; American Cancer Society, 2022).

However, significant challenges remain, especially in resource-limited countries. In these regions, low levels of public awareness, limited access to health services, and social stigma associated with breast cancer are major barriers to prevention, early detection, and treatment. Therefore, a more holistic approach is needed, including public education, increased access to health services, and further research to understand the risk factors and mechanisms of breast cancer development.

Palliative care is a holistic approach that aims to support patients with terminal illnesses and their families, both physically, emotionally, and psychosocially. In practice, palliative care focuses on improving the patient's quality of life (QoL) by reducing the burden of common symptoms, such as pain, nausea, vomiting, anxiety, and psychological distress. Patients with advanced disease often face significant challenges, both physically and emotionally, so a comprehensive approach is needed to provide optimal comfort and support.

In addition to evidence-based care through conventional medicine, many patients with advanced disease seek complementary medicine as an adjunct to their primary therapy. Complementary medicine is a method of treatment used in conjunction with conventional medicine to improve the patient's well-being. This approach involves a variety of therapies such as music therapy, aromatherapy, massage, acupuncture, yoga, and meditation.

Complementary therapies have been shown to help reduce a variety of symptoms that burden patients, such as chronic pain, fatigue, anxiety, and depression. In addition to providing physical benefits, these therapies also provide positive psychosocial experiences by creating a sense of calm, relaxation, and emotional balance. In the context of palliative care, complementary therapies provide a more personal and humane approach, helping patients live the rest of their lives with more meaning, comfort, and dignity.

Method

Study Design

This study used a systematic review design to evaluate the benefits of complementary therapies in palliative care for breast cancer patients, with a focus on pain management and psychological support on improving quality of life (QoL). This approach was designed to collect, analyze, and synthesize the available evidence comprehensively based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, to ensure methodological transparency and replicability.

Search Strategy

A comprehensive literature search was conducted using multiple electronic databases, including ScienceDirect, PubMed, and Emerald, to identify relevant articles published between 2020 and 2024. Multiple search terms were used to increase the scope of results, such as “Pain Management”, “Palliative Care”, “Therapy”, “Telemedicine”, “Quality of Life”, and “Psychological”. Boolean operators (AND, OR) were applied to combine keywords logically, to ensure a more focused and efficient search. The search was restricted to articles published in English to ensure consistency and accuracy of language interpretation. Additionally, to complement the search results, a manual search of the reference lists of relevant articles was conducted to identify additional studies that may have been missed through the primary database searches. This approach was designed to ensure that relevant literature was thoroughly accessed, providing a strong foundation for this systematic review.

Inclusion and Exclusion Criteria

Research will be included in the Review if it meets the following criteria:

1. Population: this study was women with breast cancer, in palliative or hospice care, experiencing pain and/or psychological problems, and able to follow complementary therapies such as aromatherapy, music therapy, or massage.
2. Intervention: in the form of complementary therapies to manage pain and psychological support carried out together with standard palliative care.
3. Comparison: The control group received standard palliative care without complementary therapies, with comparisons between no intervention or different types of complementary therapies.
4. Research results: include increased quality of life, decreased pain, and improved psychological well-being, measured through questionnaires, pain scales, and anxiety surveys.
5. Study design: includes RCTs, quasi-experimental studies, prospective cohorts, observational studies, or mixed methods that include qualitative and quantitative data with measurable outcomes.

Exclusion criteria include:

1. Patients with other medical conditions that affect outcomes or who are not on palliative care.
2. Studies that did not use relevant complementary therapies or that did not focus on pain and psychological support.
3. Studies without a clear control group or that use a design that does not allow for valid comparisons.

Data extraction and management

Data were extracted independently using a standardized data extraction form. Information extracted included details on study characteristics (authors, year, country, study design), population characteristics (sample size, demographic data), details of the telemedicine intervention (intervention type and duration), control group, and reported outcomes. If there were discrepancies between reviewers, these were resolved through discussion.

Quality assessment

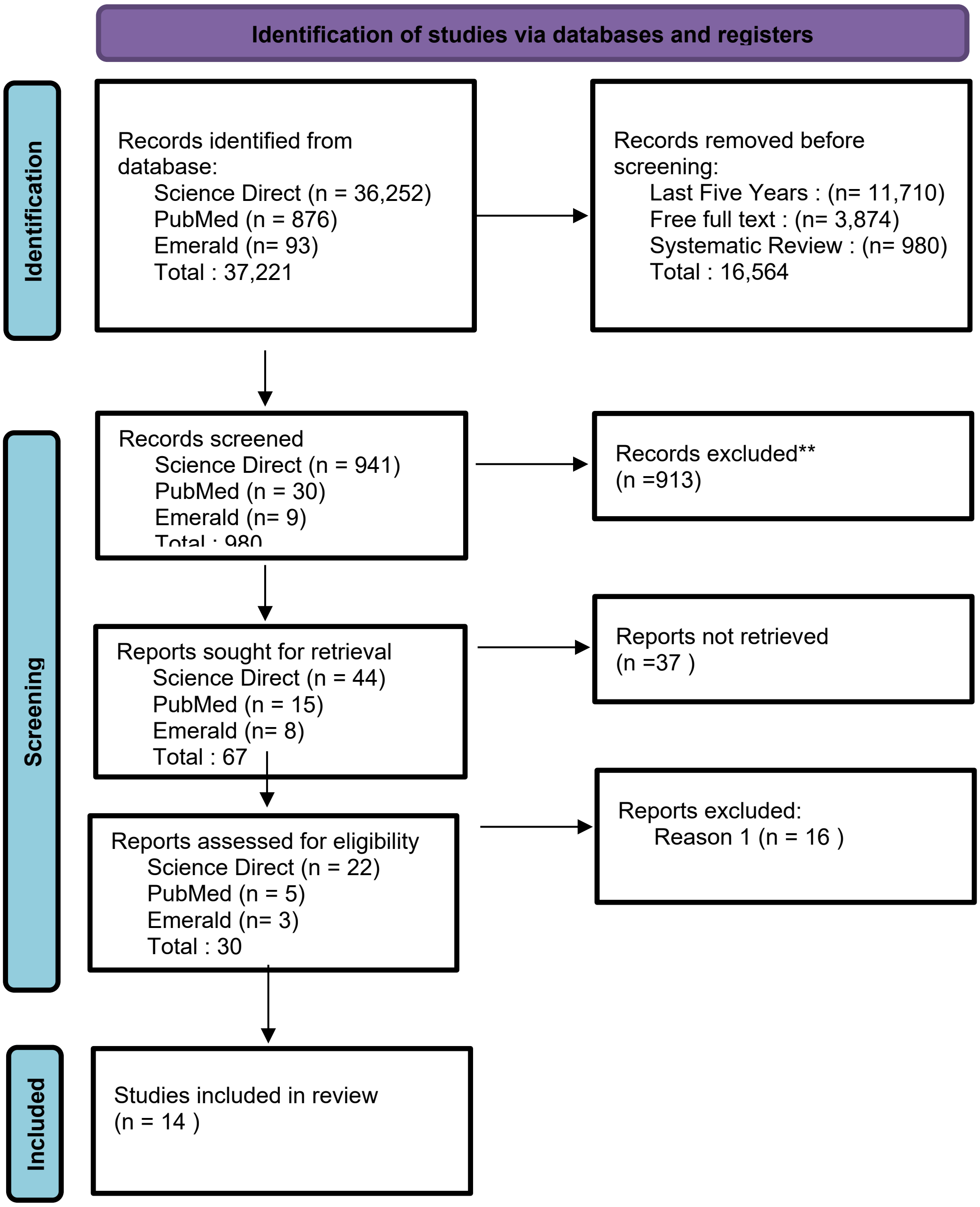
The quality of included studies was assessed using appropriate tools based on study design. RCTs or quasi-experimental studies, Prospective or longitudinal cohort studies, PRISMA, Systematic reviews. Quality assessment was performed independently by the review group, and any disagreements were resolved through discussion.

Data Synthesis and Analysis

The synthesis was conducted narratively because there were differences between studies involving different interventions, populations, and outcomes. Study findings were summarized and presented in tabular form, with key themes identified and discussed. Where possible, meta-analyses were conducted using random effects models to calculate pooled estimates of effect sizes for outcomes reported across studies. Results were presented as forest plots, and heterogeneity was assessed using the I2 statistic. Variation between studies related to pain management and quality of life in breast cancer patients was demonstrated by this statistic.

Results

A comprehensive literature search identified 37,221 records from multiple databases, including Science Direct (36,252), PubMed (876), and Emerald (93). After a screening process to remove irrelevant records, 941 records were further screened. Of these, 44 reports were requested for retrieval, but 37 reports were not accessible. After a thorough eligibility assessment, 22 reports were evaluated, and 16 of these were excluded based on predefined inclusion and exclusion criteria. The final synthesis included 14 studies that provided a range of evidence on pain management, palliative care, and the impact of telemedicine on quality of life.



No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
1.	Jodie Freeman (2024)	Switzerland	Effectiveness of music therapy, aromatherapy	Randomized Controlled Trials (RCT)	Palliative or hospice care patients, with no exclusion criteria based on disease	Music therapy, aromatherapy and massage	Pain, anxiety. Mood, and satisfaction.	Decreased pain and anxiety, as well as improvements in QoL and well-being	6 sessions over 3 weeks
2.	Celina.G. Virgen et al (2022)	French	Pharmacological management of cancer-related pain	Systematic Review	Patients experiencing cancer-related pain	Use of opioids, non-opioid analgesics, and interventional techniques such as neuraxial analgesia	Edmonton Symptom Assessment System (ESAS)	Combinations of drugs, such as methadone and duloxetine can reduce the total ESAS score.	
3.	Justin Zeien et al (2022)	United States of America	Clinical implications of organ toxicity of chemotherapeutic agents in perioperative care	Review Article	Cancer patients undergoing chemotherapy and requiring anesthesia during surgery	Optimized pain management according to the WHO analgesic ladder	The toxic effects of chemotherapy on the body's systems	More effective pain management, preventing further damage to affected organs	
4.	Flavia Firmino (2021)	Brazil	Journal of Pain and Symptom Management	Systematic review	Patients with malignant lesions due to breast cancer, especially those experiencing bleeding from malignant lesions	Use of various topical treatments for hemostasis	Effectiveness of bleeding control	The results of the study included in this study showed that active arterial bleeding was controlled within 10 minutes of application, and global bleeding control was maintained for three weeks to	

No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
								three months. In addition, odor and exudate were also controlled, with reports of improved quality of life.	
5	Katie Fitzgerald (2021)	United States of America	Exploring Factors Associated with Long-Term Opioid Therapy in Cancer Survivors: An Integrative Review	Integrative review	Cancer survivors who have completed curative treatment and are using long-term opioid therapy (LTOT)	Monitoring opioid use patterns after curative cancer treatment	Prevalence and duration of long-term opioid use	LTOT is found commonly in certain cancer survivors with an average prevalence of 24%	
6	Dominique Cranston (2024)	English	Nurse-Led Psychological Interventions for Depression in Adult Cancer Patients: A Systematic Review and Meta-Analysis of Randomized Controlled Trials	Randomized Controlled Trials (RCT)	adult cancer patients aged 18 years and over from 1,463 participants, there were 9 patients, the majority were women, but some were also men. Age range from 50-60 years	Nurse-led psychology based on cognitive behavioral therapy (CBT), reminiscence therapy and collaborative care therapy for depression.	nurse-based psychological interventions to address depression in cancer patients, given the negative impact of depression on quality of life and health outcomes. Although effective, implementation is still constrained by limited research, variability in results, and the need for better training and supervision for nurses.	nurse-based psychological interventions to address depression in cancer patients, given the negative impact of depression on quality of life and health outcomes. Although effective, implementation is still constrained by limited research, variability in results, and the need for	Varies, maximum number of sessions 7-26 sessions, duration 7-12 months.

No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
								better training and supervision for nurses.	
7	Yi An Shih (2020)	China	Nutritional Decision Making and Artificial Hydration for Terminally Ill Cancer Patients—A Systematic Review of Views from Patients, Families, and Healthcare Professionals	Systematic review	Patients with terminal cancer, their families, and health professionals. Total participants: 30,727 individuals from 36 countries	Exploration of the decision-making process related to the provision or discontinuation of artificial nutrition and hydration (ANH)	Factors that influence decisions such as cultural, ethical, medical and psychological aspects	Decision making about ANH is dynamic and influenced by various factors: Balancing quality of life and life extension.	
8	Jinke Huang (2021)	China	Effectiveness of Chi in Breast Cancer Patients: Overview of Systematic Reviews and Meta-Analyses	Systematic reviews	Adult patients diagnosed with breast cancer and receiving active breast cancer treatment (e.g. surgery, radiation therapy, chemotherapy, or antihormonal therapy)	conventional supportive care, or TC plus conventional supportive interventions	Quality of Life (QoL) as the primary outcome; secondary outcomes included pain, shoulder function, muscle strength, fatigue, sleep quality, depression, body mass index, and other clinical outcomes.	That Tai Chi (TC) may be beneficial for breast cancer (BC), but these findings should be approached with caution as the quality of the systematic reviews and meta-analyses (SRs/MAs) included in the evaluation was limited. The overall quality of evidence was found	

No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
								to be low, with high publication bias and risk of bias identified as major downstream factors. Although TC may offer potential benefits for BC patients, the authors caution against drawing firm conclusions due to the low quality of the studies. Recommendations for future research include adhering to the AMSTAR-2, PRISMA, and GRADE criteria to improve study quality. Overall, although TC shows promise, more rigorous research is needed to establish	

No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
								its efficacy as a complementary therapy for BC.	
9	Marco Warth (2021)	German	Psychosocial Interventions for Pain Management in Advanced Cancer Patients: A Systematic Review and Meta-analysis	Systematic review	Advanced cancer patients and palliative care (mostly ≥50% of stage IV cancer patients)	Relaxation therapy, cognitive-behavioral therapy, music therapy, mindfulness and acceptance-based techniques, and expressive group therapy.	Pain intensity and pain interference	Small but significant effect of psychosocial intervention on pain intensity (d = -0.29, CI = -0.54 to -0.05). There was no significant effect on pain interference. Psychosocial therapies are more effective when specifically targeted to reducing pain distress.	
10	Emma Ream (2019)	English	Telephone interventions for symptom management in adults with cancer: A systematic review	Systematic review	A total of 6,250 participants from 32 studies, involving adult cancer patients (≥ 18 years) with various types and stages of cancer.	telephone-based, often supplemented by printed or digital materials, aims to provide education, psychosocial support, and help cancer patients manage physical and	Primary: Depression, anxiety, fatigue, emotional distress, pain. Secondary: General symptoms, uncertainty, sexual symptoms, dyspnea.	significant reductions in depressive and anxiety symptoms, and improvements in fatigue and emotional distress, although inconsiste	Varies with a number of approx. 1-18, mostly 3-4 calls

No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
						psychological symptoms.		nt. Effects on other symptoms such as pain and dyspnea were variable and inconclusive.	
11	Gustavo Adolfo Pimentel-Parra et al (2021)	United States of America	Effectiveness of Digital Health on Quality of Life in Long-Term Breast Cancer Survivors: A Systematic Review	Clinical trials	Breast cancer survivors	Digital health interventions	Quality of life and its domains	The impact of digital health interventions on quality of life	1-5 weeks & time interval between 10-50 minutes
12	Caterina Caminiti (2023)	Italy	Psychosocial Impact of Virtual Cancer Care through Technology: A Systematic Review and Meta-Analysis of Randomized Controlled Trials	Systematic review	4434 adult patients with cancer, including cancer types such as breast, endometrial, ovarian, colorectal, and head and neck cancer.	Telemedicine replaces conventional face-to-face care, either completely or partially, using methods such as telephone, web applications, and telehealth messaging devices.	Quality of Life (QoL), anxiety, global stress (distress), and depression, were measured using measuring instruments such as the EORTC QLQ-C30, STAI	Telemedicine does not worsen, but rather improves QoL, anxiety, and distress compared to face-to-face care.	
13	Yanwei Huang (2022)	China	Internet-based support interventions for cancer patients: a systematic review and meta-analysis	Random Controlled Trial (RCT)	5,368 patients in 35 studies	Internet-based support interventions (including websites, mobile apps, and WeChat platforms)	Quality of life, psychological distress, and physical variables	Improved quality of life and reduced psychological stress	2-9 months
14	Ausanee Wanchai (2024)	Thailand	Effect of Yoga on Breast Cancer-Related Lymphedema: A Systematic Review	Random Controlled Trial (RCT)	Women who have had breast cancer surgery and are at risk for lymphedema	Asanas (Yoga postures), Pranayama (Breathing exercises), Meditation	Biompedance Soectroscopy, Arm volume measurement, Self-assessed edema score	Arm volume, Tissue induration, Level of sensation, pain, and fatigue, Self-	4-12 weeks

No	Authors	Country	Title	Study Design	Population	Intervention	Measure	Outcome	Time
								assessed edema measurement	

Key Findings

This Systematic Review synthesizes evidence from fourteen studies examining the benefits of complementary therapies. The included studies encompass a variety of study designs, including randomized control trials (RCTs), System reviews, clinical trials, integrative reviews, review articles, each providing insight into the effectiveness of complementary therapies.

Quality of nursing

The quality of nursing in palliative care relies heavily on a holistic and evidence-based approach, with the primary goal of improving the patient's quality of life and reducing physical and psychological burden. One of the main focuses in palliative care is pain management. Various strategies have been proven effective in reducing the pain experienced by patients, allowing them to live their days more comfortably. Optimal pain management not only relieves physical symptoms but also has a positive impact on the patient's emotional state.

Psychological aspects are also an important element in palliative care. Many cancer patients experience anxiety, depression, or emotional distress due to their illness. Nurse-based psychological support has been shown to have a significant impact in helping patients cope with these challenges. Psychosocial interventions specifically designed to reduce emotional distress not only help patients feel calmer but also indirectly affect physical symptoms, such as pain and fatigue. However, the implementation of this psychological support often faces obstacles, such as the need for further training for nurses and limited resources. To ensure its effectiveness, this approach needs to be continuously improved through monitoring and further research.

Technological innovations, such as telemedicine, have also played a significant role in improving the quality of nursing care. Telemedicine allows patients to receive care from home, providing greater convenience and reducing the stress that often comes with having to access a health facility in person. In addition, this approach has been shown to improve patients' quality of life by reducing anxiety and psychological distress. Telemedicine also allows patients to monitor their physical symptoms, such as pain, fatigue, and swelling, through self-measurements at home, which helps in more effective management of their condition.

In the context of decision-making regarding artificial nutrition and hydration (ANH), nurses have a key role in helping patients and families weigh the benefits and risks of these interventions. These decisions often involve complex trade-offs between prolonging life and maintaining the patient's quality of life. Therefore, an empathetic, needs-based approach is essential to ensure that decisions are made in line with the patient's and family's wishes.

However, not all interventions produce uniform results. Several studies have shown that psychosocial therapies are more effective when specifically designed to reduce emotional distress, although results for specific physical symptoms, such as dyspnea or fatigue, have been variable. This suggests that personalized, needs-based care is essential to achieving optimal outcomes.

Overall, good quality nursing in palliative care is reflected in the ability to integrate various approaches—from physical symptom management, psychological support, to the use of technology. With a holistic and patient-centered approach, nurses can help cancer patients, especially those in the final stages of the disease, live the rest of their lives with more meaning, comfort, and dignity.

Patient Outcomes

Patient outcomes from the quality of care provided in the context of palliative care can be seen through a variety of positive changes in the patient's physical and emotional well-being. When palliative care is carried out with a good approach, the results achieved include a reduction in distressing symptoms and an improvement in overall quality of life.

One of the most visible outcomes is pain relief. With effective pain management, patients feel much more comfortable, allowing them to go about their daily activities with greater ease. Other physical symptoms, such as fatigue and shortness of breath, are also more manageable, meaning patients can feel more refreshed and less hampered by debilitating symptoms. When patients experience a reduction in physical symptoms, they have more energy to interact with family, friends, or even participate in activities they enjoy, albeit in a more limited capacity.

In addition to pain management, good quality nursing care also has an impact on the emotional well-being of patients. Many patients experience anxiety, stress, or depression when facing a serious illness. Through the psychosocial support provided by nurses, patients can feel calmer and more prepared to deal with their condition. As a result, many patients report reduced anxiety and a greater sense of peace, which also has a positive impact on their physical health. By feeling more emotionally stable, patients feel stronger in facing the challenges that come with terminal illness.

The support given to the patient’s family also plays a role in the overall outcome. When the family is involved in the care and given a clear understanding of the patient’s condition and how to provide support, they feel more prepared and able to reduce their own stress. This also strengthens the bond between the patient and family, giving the patient a sense of reassurance because they know they are emotionally supported.

The use of technology, such as telemedicine, has another positive outcome by allowing care to be provided from home. Patients do not need to visit the hospital as often, which reduces anxiety and provides greater comfort. This technology allows for regular monitoring of the patient's condition, so that nurses can identify problems earlier and provide appropriate interventions before symptoms worsen. In this way, patients can still feel cared for even though they do not have to be in the hospital all the time.

Overall, patient outcomes from the quality of care provided in palliative care are improvements in their physical and emotional well-being, reduction in distressing symptoms, and improved quality of life. Patients feel calmer, more comfortable, and more able to cope with the challenges of their illness with the support of caregivers, family, and technology. Thus, quality palliative care provides patients with the opportunity to live their lives with greater dignity, despite the severity of their illness.

Risk of Bias Assessment

The risk of bias in research can affect the accuracy of the results. In RCTs, selection bias occurs if participants are not randomly selected, performance bias if treatments are not uniform, and detection bias if measurements are inconsistent. Publication bias occurs when only significant results are published. In systematic reviews, selection bias occurs when only certain studies are selected, publication bias occurs when studies with negative results are ignored, and interpretation bias if conclusions are not objective. In clinical trials, selection bias occurs when participant selection is not random, performance bias if interventions are not uniform, and detection bias if outcome measurements are inconsistent. Publication bias can also occur. In integrative reviews, selection and interpretation bias can occur when studies are not systematically selected or results are selected to support a particular view. To reduce bias, it is important to select and analyze data objectively, use appropriate randomization, and maintain transparency in methodology.

Discussion

Interpretation of Findings

Based on a systematic review examining the benefits of complementary therapies in palliative care for breast cancer, several important findings can be interpreted. Pain management and psychological support are two key aspects that affect the quality of life of patients with advanced breast cancer. Complementary therapies, such as music therapy, massage, and aromatherapy, have been shown to provide significant reductions in pain intensity and anxiety, as well as improving patients' emotional well-being.

Pain management is a major focus of palliative care. Findings from studies suggest that a combination of complementary therapies can reduce pain in breast cancer patients by increasing comfort and reducing the physical strain often associated with chronic pain. This suggests that more effective pain management may improve the quality of life for patients with breast cancer who experience severe symptoms.

Palliative care focuses on improving the quality of life of patients, rather than curing the disease itself. This review highlights how complementary therapeutic approaches help achieve this goal by providing physical and emotional support. In addition, targeted psychosocial interventions to reduce stress and anxiety play a vital role in providing the support and comfort needed for patients facing terminal illness.

Complementary therapies have shown positive results in improving overall well-being. The findings suggest that therapies such as massage and music therapy, which focus on reducing anxiety and relaxation, can have a calming effect on anxious and depressed patients. Although the effects vary from person to person, the results suggest that complementary therapies can serve as a useful adjunct to conventional therapies.

Telemedicine has also been shown to have a positive impact, especially in improving the quality of life of patients who are unable to regularly visit a health facility. The use of telemedicine for remote monitoring allows patients to continue to receive medical and psychological support without having to leave their homes, reducing the anxiety associated with in-person visits to the hospital.

Overall Quality of Life (QoL) improved with the integration of complementary therapies into palliative care. Patients who received physical and psychological support through this approach reported a decrease in symptoms of anxiety and depression, and an increase in well-being and control over physical symptoms. Finally, Psychological Support has been shown to play a major role in improving the quality of life for breast cancer patients. Therapy that addresses stress and anxiety helps patients feel better emotionally and mentally, which can contribute to more effective pain management and improve overall quality of life.

Overall, this review suggests that a combination of complementary therapies, better pain management, psychological support, and the use of technology such as telemedicine may provide significant benefits in palliative care, improving the quality of life of patients with breast cancer.

Challenges and Obstacles

Conducting a literature review presents a number of challenges and barriers that need to be overcome. One major challenge is the limited nature of existing research, where results and conclusions can be affected by lack of data or varying study quality. Furthermore, developing a comprehensive synthesis is often difficult due to differences in results between studies. Determining inclusion and exclusion criteria is also a complex task, especially in ensuring that selected studies are relevant and meet the required methodological standards. Another challenge is the heterogeneity of studies, such as variations in design, population, and intervention, which can complicate the synthesis process, including the possibility of conducting meta-analyses. Finally, access to the literature is also a barrier, especially when relevant literature is difficult to find or is not available through searches in major databases.

Implications for Practice and Policy

The literature review suggests several important implications for practice and policy in breast cancer care. Policies need to support the integration of complementary therapies into palliative care, as these approaches have been shown to improve quality of life, pain management, and psychological support for patients. In addition, better training is needed for health workers, including nurses, to effectively implement complementary therapy interventions, although training and supervision are challenges. To encourage widespread adoption of evidence-based practice, access to relevant, high-quality research should be improved, including studies that may be difficult to find in primary databases. Furthermore, the development of evidence-based care protocols that include a holistic approach is essential to improving the management of breast cancer patients. Therefore, close collaboration between researchers, practitioners, and policy makers is key to ensuring better quality care for patients.

Recommendations for Future Research

Care Protocol Development: More effective management of breast cancer patients can be achieved by implementing care protocols that include holistic interventions and evidence-based approaches. This shows the importance of collaboration between researchers, practitioners and policy makers to improve the quality of care provided to patients with breast cancer. Protocol Development: Research is needed to develop standardized care protocols that combine complementary therapies with conventional palliative care. To ensure that these protocols are consistent and effective in clinical practice, this research is needed.

Review Limitations

This systematic review has limitations in the existing research, which may affect the results and conclusions of the systematic review. The variability of results between different studies poses a challenge in preparing a comprehensive synthesis. There is a need for better training and supervision for nurses in implementing interventions.

Conclusion

Based on the findings of the literature review, it can be concluded that breast cancer is a disease caused by the growth of abnormal cells in breast tissue, which can form malignant tumors. The most common types of breast cancer are invasive ductal carcinoma and invasive lobular carcinoma. This disease not only affects physical aspects, such as tissue damage, but also significantly affects the psychological, social, and quality of life aspects of patients.

Risk factors that contribute to the development of breast cancer include biological factors, such as age, family history, and genetic mutations, as well as hormonal and lifestyle factors, such as unhealthy diet and lack of physical activity. Although the incidence of breast cancer continues to rise, advances in early detection and treatment, such as mammography screening programs and targeted therapies, have given patients hope for longer survival.

In the context of palliative care, pain management and improving the patient's quality of life are the primary focus. Complementary therapies have been shown to be effective in reducing symptoms of depression and anxiety, as well as improving overall quality of life. Although there is variability in outcomes and a need for better training and supervision for nurses, complementary therapies can provide important psychological support for cancer patients. Overall, the integration of complementary therapies into palliative care may provide a more holistic approach, with significant benefits for breast cancer patients, although challenges in implementation remain.

References

[1] Caminiti, C., Annunziata, M.A., di Giulio, P., Isa, L., Mosconi, P., Nanni, M.G., Piredda, M., Verusio, C., Diodati, F., Maglietta, G., & Passalacqua, R. (2023). Psychosocial Impact of Virtual Cancer Care through Technology: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. In Cancers (Vol. 15, Issue 7). Multidisciplinary Digital Publishing Institute (MDPI).https://doi.org/10.3390/cancers15072090

[2] Cranstoun, D., Baliousis, M., Merdian, H.L., & Rennoldson, M. (2024). Nurse-Led Psychological Interventions For Depression In Adult Cancer Patients: A Systematic Review And Meta-Analysis of Randomized Controlled Trials. In Journal of Pain and Symptom Management (Vol. 68, Issue 1, pp. e21–e35). Elsevier Inc.https://doi.org/10.1016/j.jpainsymman.2024.03.028

[3] Firmino, F., Villela-Castro, D.L., Santos, J. dos, & Conceição de Gouveia Santos, V.L. (2021). Topical Management of Bleeding From Malignant Wounds Caused by Breast Cancer: A Systematic Review. In Journal of Pain and Symptom Management (Vol. 61, Issue 6, pp. 1278–1286). Elsevier Inc.https://doi.org/10.1016/j.jpainsymman.2020.10.020

[4] Huang, J., Liu, H., Chen, J., Cai, X., & Huang, Y. (2021). The Effectiveness of Tai Chi in Patients With Breast Cancer: An Overview of Systematic Reviews and Meta-Analyses. In Journal of Pain and Symptom Management (Vol. 61, Issue 5, pp. 1052–1059). Elsevier Inc.https://doi.org/10.1016/j.jpainsymman.2020.10.007

[5] Huang, Y., Li, Q., Zhou, F., & Song, J. (2022). Effectiveness of internet-based support interventions on patients with breast cancer: a systematic review and narrative synthesis. BMJ Open, 12(5).https://doi.org/10.1136/bmjopen-2021-057664

[6] Jodie, F., Anna, K., & Ursula, W. (2024). Effectiveness of music therapy, aromatherapy, and massage therapy on people in palliative care with end-of-life needs: A systematic review. Journal of Pain and Symptom Management.https://doi.org/10.1016/j.jpainsymman.2024.07.024

[7] Jones, K.F., Fu, M.R., Merlin, J.S., Paice, J.A., Bernacki, R., Lee, C., & Wood, L.J. (2021). Exploring Factors Associated With Long-Term Opioid Therapy in Cancer Survivors: An Integrative Review. In Journal of Pain and Symptom Management (Vol. 61, Issue 2, pp. 395–415). Elsevier Inc.https://doi.org/10.1016/j.jpainsymman.2020.08.015

[8] Pimentel-Parra, G. A., Soto-Ruiz, M. N., San Martín-Rodríguez, L., Escalada-Hernández, P., & García-Vivar, C. (2023). Effectiveness of Digital Health on the Quality of Life of Long-Term Breast Cancer Survivors: A Systematic Review. In Seminars in Oncology Nursing (Vol. 39, Issue 4). Elsevier Inc.https://doi.org/10.1016/j.soncn.2023.151418

[9] Ream, E., Hughes, A.E., Cox, A., Skarparis, K., Richardson, A., Pedersen, V.H., Wiseman, T., Forbes, A., & Bryant, A. (2020). Telephone interventions for symptom management in adults with cancer. In Cochrane Database of Systematic Reviews (Vol. 2020, Issue 6). John Wiley and Sons Ltd.https://doi.org/10.1002/14651858.CD007568.pub2

[10] Shih, Y.A., Wang, C., Jin, S., Feng, W., & Lu, Q. (2021). Decision Making of Artificial Nutrition and Hydration for Cancer Patients at Terminal Stage—A Systematic Review of the Views From Patients, Families, and Healthcare Professionals. In Journal of Pain and Symptom Management (Vol. 62, Issue 5, pp. 1065–1078). Elsevier Inc.https://doi.org/10.1016/j.jpainsymman.2021.04.013

[11] Virgen, C.G., Kelkar, N., Tran, A., Rosa, C.M., Cruz-Topete, D., Amatya, S., Cornett, E.M., Urits, I., Viswanath, O., & Kaye, A.D. (2022). Pharmacological management of cancer pain: Novel therapeutics. In Biomedicine and Pharmacotherapy (Vol. 156). Elsevier Masson srlhttps://doi.org/10.1016/j.biopha.2022.113871

[12] Wanchai, A., & Armer, J. M. (2020). The effects of yoga on breast-cancer-related lymphedema: a systematic review. In Journal of Health Research (Vol. 34, Issue 5, pp. 409–418). Emerald Publishing.https://doi.org/10.1108/JHR-09-2019-0210

[13] Warth, M., Zöller, J., Köhler, F., Aguilar-Raab, C., Kessler, J., & Ditzen, B. (2020). Psychosocial Interventions for Pain Management in Advanced Cancer Patients: a Systematic Review and Meta-analysis. In Current Oncology Reports (Vol. 22, Issue 1). Springer.https://doi.org/10.1007/s11912-020-0870-7

[14] Zeien, J., Qiu, W., Triay, M., Dhaibar, H.A., Cruz-Topete, D., Cornett, E.M., Urits, I., Viswanath, O., & Kaye, A.D. (2022). Clinical implications of chemotherapeutic agent organ toxicity on perioperative care. In Biomedicine and Pharmacotherapy (Vol. 146). Elsevier Masson srlhttps://doi.org/10.1016/j.biopha.2021.112503