



Self-Management in Breast Cancer Survivorship: A Scoping Review of Patient Needs, Barriers, and Facilitators

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ABSTRACT

Introduction: Breast cancer is a global health issue causing significant physical, emotional, and social burdens. Self-management is crucial in breast cancer care, but challenges such as healthcare access, emotional struggles, and financial difficulties could hinder its effectiveness. **Objective:** This scoping review aims to systematically explore the evidence about self-management in breast cancer care by identifying needs, barriers, and facilitators on its implementation. **Materials and Methods:** Using the Joanna Briggs Institute (JBI) framework, a comprehensive search was conducted across PubMed and Google Scholar for studies published between January 1st, 2019 and March 4th, 2025. The focus was on adult breast cancer patients, with studies addressing self-management needs, challenges, or supportive factors. Data were extracted and analysed using a critical interpretive synthesis approach. **Results:** The review included 14 studies, highlighting that breast cancer survivors face diverse needs, such as managing physical symptoms, accessing emotional support, finding reliable information, and building social connections. Key challenges included limited access to healthcare, emotional distress, and financial constraints. Supportive factors such as digital health tools, peer support networks, and personalized care strategies were found to improve self-management outcomes. Digital health innovations, such as mobile apps and online platforms, showed promise in enhancing patient engagement and treatment adherence. **Conclusion:** The review emphasizes the significance of personalized, technology-supported, and socially connected self-management strategies in breast cancer care, suggesting future research should focus on inclusive, culturally sensitive interventions.

ARTICLE INFO

Article History:

Received: Oktober 16th, 2025

Revised: April 04th, 2026

Accepted: June 1st, 2026

First Available Online:
June 26th, 2026

Published: June 30th, 2026

Keywords:

*Breast cancer survivorship,
Self-management,
Patient needs, Barriers,
Facilitators, Scoping review.*

1. INTRODUCTION

Breast cancer remains a significant global health challenge, with 2.3 million new cases in 2020 and identified as the most commonly diagnosed cancer in women worldwide (Sung et al., 2021). The development of early diagnosis and therapy enhances clinical results; nonetheless, disparities persist. For example, survival rates over five years surpass 90% in high-income nations, however they decline to below 40% in low-income nations, indicating diagnostic delays and inequitable access to healthcare (Arnold et al., 2022). Moreover, this issue extends far beyond the physical symptoms associated with the disease. Treatments such as chemotherapy and radiation often result in long-term consequences on physical, psychological, and social well-being, highlighting the urgent need for holistic care models that address the complex interplay faced by breast cancer patients (Runowicz et al., 2016).

Self-management has increasingly been recognized as a central component of breast cancer care, allowing patients to take an active role in managing symptoms, treatments, and psychosocial aspects (World Health Organization, 2022). Self-management strategies can include symptom monitoring, treatment adherence, and emotion regulation, all of which are associated with improved quality of life, a decreased risk of recurrence, and enhanced patient autonomy in managing their chronic disease (National Cancer Institute, 2021). These strategies are largely characterized by the ability to adapt to chronic disease and maintain health and well-being (National Cancer Institute, 2021; World Health Organization, 2022).

Evidence indicates that self-management programs are effective in improving health outcomes among patients with chronic conditions. Data from randomized controlled trials (RCTs) show that participants in structured self-management interventions experience substantial improvements in physical functioning, symptom management, and psychological well-being (Zhang et al., 2021). These programs support patient empowerment by promoting patients' ability to monitor symptoms, take prescribed medications, and adopt healthier lifestyles, thus potentially reducing hospitalization and emergency visits (Haynes et al., 2005). Meta-analyses further validate these findings, indicating that self-management interventions can improve treatment adherence, quality of life, and patient satisfaction (Jordan et al., 2008). Studies indicate that tailored self-management strategies, including behavioral coaching, goal-setting, and digital health applications, can significantly enhance adherence to medication regimens and disease-specific guidelines (Brady et al., 2013). Moreover, evidence suggests that these programs foster self-efficacy, enabling individuals to maintain long-term health improvements and engage more actively in their care (McCabe et al., 2021). Beyond individual benefits, self-management programs may also contribute to healthcare system efficiency by reducing reliance on costly acute care services. Studies show that patients enrolled in structured self-management interventions may report fewer hospital admissions and readmissions, potentially leading to decreased healthcare expenditures (Bradley et al., 2025). Additionally, integrating self-management education within primary and community care settings can enhance continuity of care and promote interdisciplinary collaboration among healthcare providers (Fenwick et al., 2015).

Despite these benefits, several challenges remain in optimizing the implementation and accessibility of self-management programs. Factors such as socioeconomic status, digital literacy, and healthcare disparities can affect the effectiveness of these programs, requiring individualized and culturally tailored interventions. Digital health technologies, such as mobile health applications and telehealth coaching, show promise for overcoming these barriers by providing remote access to support and resources (Fenwick et al., 2015).

Previous reviews have primarily examined the effectiveness of specific self-management interventions, digital health tools, or survivorship care models among cancer or breast cancer populations. Although these reviews provide important evidence regarding intervention outcomes, they often focus on what interventions work rather than why survivors may need support, what barriers limit self-management, and what facilitators enable sustained self-care. Needs, barriers, and facilitators have rarely been synthesized comprehensively within a single framework specific to breast cancer survivorship. This gap limits the ability of healthcare professionals to design patient-centered survivorship programs that respond not only to clinical symptoms but also to emotional, informational, social, and healthcare-system challenges.

To address these gaps, this scoping review aims to systematically map the existing evidence on breast cancer self-management using the Joanna Briggs Institute (JBI) framework (Peters et al., 2020). The JBI framework will guide the review process, ensuring a comprehensive and structured exploration of the topic. This will include defining clear inclusion and exclusion criteria, systematically searching multiple databases, and critically appraising the quality of the evidence. Through this process, the review will provide a detailed overview of current knowledge, highlight key trends and gaps in the literature, and offer insights into effective self-management practices. Ultimately, this scoping review will serve as a foundational resource for researchers, healthcare providers, and policymakers seeking to improve breast cancer care and support patient-centered self-management strategies. Therefore, this scoping review aimed to map and synthesize available evidence on self-management needs, barriers, and facilitators among adult breast cancer patients and survivors.

2. METHODS

Study Design

A scoping review was performed to systematically investigate the literature on self-management in the breast cancer context, focusing on patient needs, challenges, and facilitators. The review was guided by the methodological framework developed by Arksey & O'malley (2005) and refined by Levac et al. (2010). The framework comprises five key stages: (1) defining the research question, (2) identifying relevant studies, (3) selecting appropriate studies, (4) charting the data, and (5) collating, summarizing, and reporting the findings. The PRISMA Extension for Scoping Reviews (PRISMA-ScR) guidelines were followed to ensure methodological transparency and reporting rigor (Tricco et al., 2018).

Searching Strategies

A systematic search was conducted across PubMed and Google Scholar for studies published between January 1, 2019, and March 4, 2025. The search strategy employed a combination of keywords and Medical Subject Headings (MeSH) terms related to “self-management,” “breast cancer,” “needs,” “barriers,” and “facilitators.” The search string included: “Breast Cancer” AND “Self-Management” AND (“needs” OR “Demand” OR “barriers”) AND “facilitators.” Boolean operators (AND, OR) were utilized to refine the search results. Furthermore, the reference lists of selected studies were manually reviewed to identify additional relevant publications.

Inclusion and Exclusion Criteria

Studies were included if they were based on adult patients (aged 18 years or older) diagnosed with breast cancer, regardless of the stage of cancer or the phase of treatment (e.g., active treatment, survivorship, palliative care). The studies needed to offer information on themes of needs, barriers, or facilitators related to self-management of breast cancer and could utilize quantitative, qualitative, or mixed-method designs. Only studies in English and Indonesian were included. Studies of pediatric or adolescent breast cancer patients were excluded, as were conference abstracts, editorials, opinion articles, or commentaries without original data.

Data Extraction

The data extraction was done using a data extraction form with the key fields being title, author, publication year, country of publication, study objectives, study design, study population, and sample size. The extraction also aimed to categorize self-management needs; these included: physical (e.g., symptom management [e.g., pain intensity, discomfort, coping strategies], treatment side effects [e.g., nutrition, sleep difficulties, managing symptoms], physical recovery), psychological (e.g., coping [e.g., depression, anxiety, fear of recurrence]), social (e.g., family, friends, or support group support), educational needs (e.g., reading information about the condition, treatment options, self-care strategies, or lifestyle changes). Categories for barriers to self-management included: individual-level barriers (e.g., lack of knowledge, low health literacy, emotional distress), healthcare system barriers (e.g., limited access to resources, inadequate

personalized care, poor communication with providers), and sociocultural-economic barriers (e.g., financial constraints, lack of insurance). Barriers to self-management were also described, such as: individual-level factors (e.g., motivation, self-efficacy, positive coping strategies), and healthcare system factors (e.g., digital health tools, patient-centered care, access to educational resources).

Quality of Study Assessment

The quality of the included studies was assessed using appropriate tools according to study type. The Newcastle-Ottawa Scale was used to assess the quality of observational studies, while the Critical Appraisal Skills Programme (CASP) checklist and Joanna Briggs Institute (JBI) critical appraisal tools were employed for qualitative studies. Mixed-methods studies were evaluated using the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018) and the Joanna Briggs Institute Critical Appraisal Checklist for Mixed-Methods Studies.

Data Analysis

Data were analyzed using thematic synthesis. Extracted findings were first grouped according to self-management needs, barriers, facilitators, and intervention characteristics. The analysis then examined relationships among these categories to identify how patient needs created self-management demands, how barriers limited self-management capacity, and how facilitators enabled self-management behaviors. The synthesis was informed by self-management concepts and Bandura's Self-Efficacy Theory to interpret how confidence, support, and access to resources influenced survivors' ability to engage in self-management.

3. RESULTS

Searching results

A total of 738 records were identified. After removing 111 duplicate records, 332 records marked as ineligible by automation tools, and 37 records removed for other reasons, 258 records were screened by title and abstract. Of these, 173 records were excluded. Eighty-five reports were sought for retrieval, of which 62 could not be retrieved. Twenty-three full-text reports were assessed for eligibility. Nine reports were excluded because they focused on prevention, included mixed cancer populations without breast cancer-specific data, or did not address self-management needs, barriers, or facilitators. Fourteen studies were included in the final synthesis.

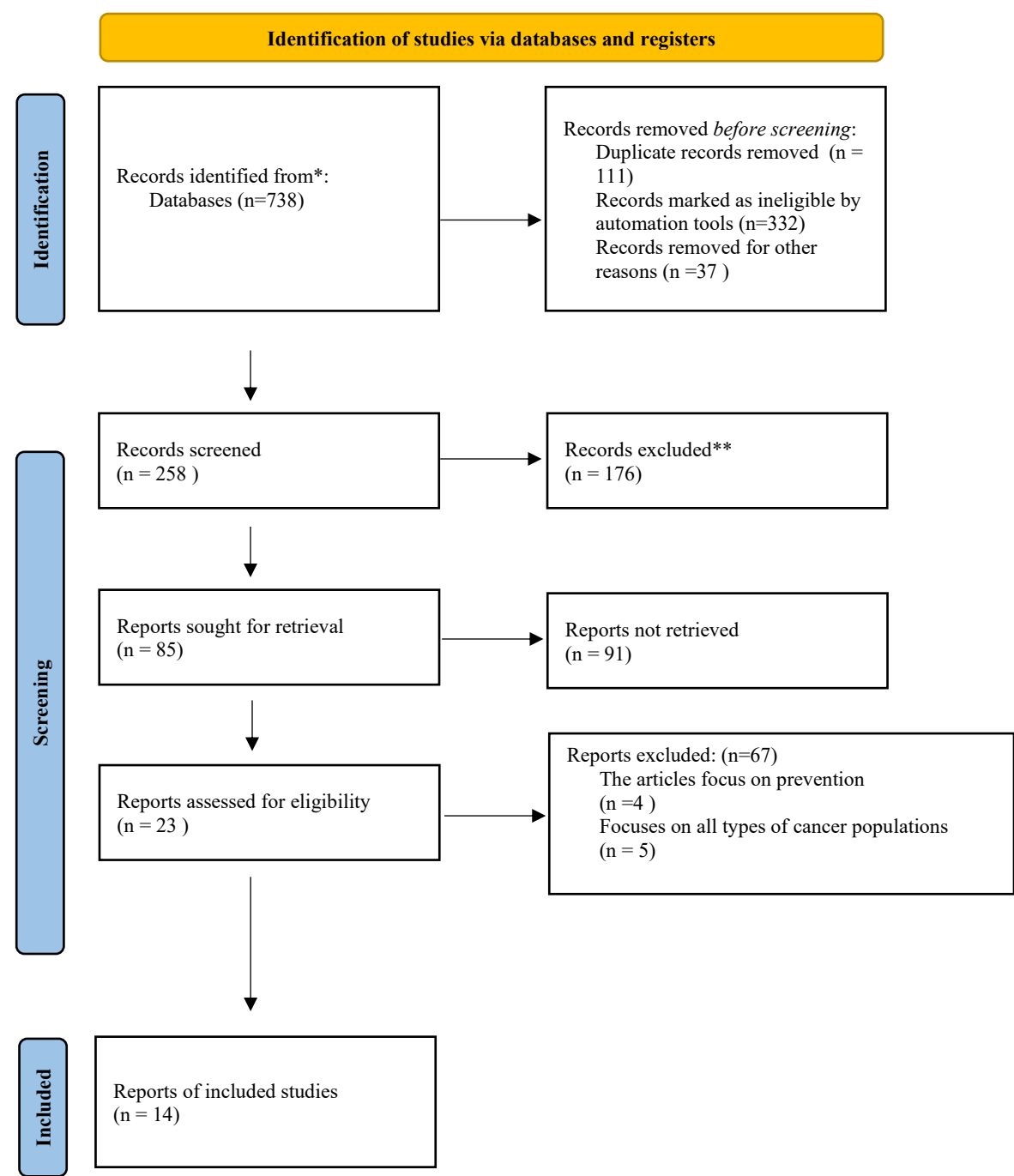


Figure 1. PRISMA flow chart

Characteristics of included studies

The interventions and methods reviewed span several approaches across different dimensions of breast cancer care and self-management (Table 1). Most of these studies focus on patients and survivors of breast cancer, using a wide range of approaches, including innovative digital health interventions such as SMS text messaging programs (Singleton et al., 2023) and web-based platforms (Wheelock et al., 2015), as well as more traditional approaches such as mindfulness-based stress reduction techniques (Bisseling et al., 2017) and dietary modification interventions (Feathers et al., 2015). Most of these studies are clinical trials, although some incorporate qualitative or mixed-methods designs to understand participant experiences (Hahn et al., 2023; Terranova et al., 2017). Sample sizes differ widely; some studies recruited smaller groups to obtain qualitative insights (Lally et al., 2019), while others included larger cohorts for quantitative assessment (Lugtenberg et al., 2020). Interventions targeting emotional well-being (Lepore et al., 2019), physical activity (Kokts-Porietis et al., 2019), nutritional changes (Feathers

et al., 2015), and psychological adaptation (Lally et al., 2019) can all be tailored to address individual needs, emphasizing the complex and multidimensional nature of breast cancer care.

Digital health tools, such as mobile applications, have proven to be valuable support mechanisms for self-management, allowing individuals to access information and resources easily and conveniently (Wu et al., 2024). Other forms of peer support networks and social groups are similarly critical, providing both social and practical support that reinforces survivors' self-care practices (Lepore et al., 2019). Individualized approaches to intervention have proven effective in promoting behavioral change, highlighting the value of personalized care (Coffey et al., 2016). These facilitators emphasize the importance of a supportive ecosystem and tailored approaches to enable optimal self-management behaviors.

Several factors can significantly enhance the likelihood of effective self-management strategies despite existing challenges. Mobile applications and online platforms for digital health assistance have been useful in offering support and information, facilitating the self-management process (Wu et al., 2024). Peer support networks and social communities also play a meaningful role by providing emotional support and practical advice that encourage survivors to engage in self-care practices (Lepore et al., 2019). Personalized interventions, which tailor recommendations to individual needs rather than applying a one-size-fits-all approach, may also facilitate effective self-management (Coffey et al., 2016). These facilitators highlight the importance of a supportive environment and personalized approaches in promoting effective self-management.

Research in this area further supports the importance of a broad approach to breast cancer care that addresses physical, emotional, informational, and social needs. Through the implementation of digital health tools, peer support systems, and personalized interventions, healthcare providers may help survivors overcome barriers and achieve better outcomes in their self-management journey (Yang et al., 2025).

Most included studies focused specifically on breast cancer patients or survivors. Studies involving broader cancer survivorship populations were retained only when their findings were directly relevant to self-management domains applicable to breast cancer survivorship, such as symptom management, digital self-management support, psychological adjustment, or stepped care. These studies were used as complementary evidence and were interpreted cautiously.

Quality of studies

Overall, the key strengths across studies included clear research objectives, appropriate methodologies, and robust data analysis. Common limitations included potential selection bias, limited generalizability, and insufficient discussion of confounding factors. This quality assessment provides a foundation for interpreting the findings of the included studies and highlights areas for improvement in future research. Future studies should prioritize larger sample sizes, long-term follow-up, and critical appraisal of contextual factors influencing outcomes.

Self-care management strategies

Self-management strategies evaluated in the included studies are diverse and tailored to address the unique challenges faced by individuals with breast cancer (Table 1). Examples include digital health solutions, such as SMS-based messaging interventions (Singleton et al., 2023) and web-based platforms for symptom management (Wheelock et al., 2015). These technological tools provide ongoing support and information that may facilitate effective self-management. Other commonly used strategies include mindfulness-based stress reduction techniques (Bisseling et al., 2017) and dietary modification interventions (Feathers et al., 2015), which focus on psychological well-being and physical health, respectively. The combination of these approaches may contribute to improvements in emotional well-being, physical activity, and dietary behaviors. However, their effectiveness may depend on participant engagement and the quality of the support structures provided.

Table 1. Characteristics of included studies (n=14)

Author(s)	Year	Country	Study Design	Study Objectives	Population	Sample Characteristics	Instrument Used	Outcomes	Key Recommendations
Hahn et al.	2023	USA	Qualitative Study	Explore barriers and facilitators to depression screening in breast cancer patients	Breast cancer patients in medical oncology	patients with breast cancer	Interviews, thematic analysis	Identified barriers (e.g., time constraints) and facilitators (e.g., patient education)	Develop Implement systematic screening and provider training to improve depression screening adherence
Singleton et al.	2023	Australia	Mixed Methods	Evaluate a text message program (SMS-based health) for breast cancer survivors during COVID-19	Breast cancer survivors	841 Participants were eligible	Surveys, interviews, RE-AIM framework	Improved engagement with SMS and psychological well-being	Expand digital health (SMS Programs) interventions for survivors
Singleton et al.	2017	Australia	Clinical Trial	Explore weight, dietary, and physical activity changes in breast cancer survivors	Breast cancer survivors	15 women following treatment for breast cancer	Surveys, interviews	Positive changes in weight and lifestyle	Integrate lifestyle interventions into survivorship care
Lally et al.	2019	USA	Clinical Trial	Examine effects of social constraints and web-based psychoeducation on psychological adjustment	Breast cancer patients	100 women within 0-3 months of first, stage 0-II breast cancer diagnosis	Surveys, psychoeducational web modules	Improved psychological adjustment	Use web-based tools for early psychological support
Kokts-Porietis et al.	2019	Canada	Clinical Trial	Explore perspectives on home-based physical activity interventions using wearable technology	Breast cancer survivors	6 women used a qualitative approach and 22 participants from the physical activity interventions	Surveys, interviews	Positive feedback on wearable technology	Improve usability and promote wearable tech for physical activity

Author(s)	Year	Country	Study Design	Study Objectives	Population	Sample Characteristics	Instrument Used	Outcomes	Key Recommendations
Wheelock et al.	2015	USA	Randomized Controlled Trial	Evaluate a web-based symptom management system for breast cancer survivors	Breast cancer survivors	102 participants with criteria : 1) had TNMstage I, II, or III breast cancer; 2) had completed acutetreatment (including surgery, radiotherapy, chemotherapy, or any experimental therapies offered in a clinicaltrial as adjuvant treatment); 3) had recovered from all serious side effects of the acute phase of treatment; 4) spokeEnglish; and 5) had access to a personal or public com-puter.	Web-based tool, QoL assessments	Improved symptom management	Integrate web-based tools into survivorship care
Shen et al.	2015	USA	Clinical Trial	Examine food environments' impact on dietary modification trials	Breast cancer patients	102 participants breast cancer survivors	Food environment assessments, participant surveys	Food environments impact adherence	Address environmental barriers in dietary interventions
Feathers et al.	2019	USA	Randomized Controlled Trial	Promote readiness for genetic counseling among breast cancer survivors	Breast cancer survivors	119 participants breast cancer survivors	Surveys, Readiness assessments, counseling sessions	Increased readiness for genetic counseling	Provide tailored genetic counseling support

Author(s)	Year	Country	Study Design	Study Objectives	Population	Sample Characteristics	Instrument Used	Outcomes	Key Recommendations
Lugtenberg et al.	2020	Netherlands	Randomized Controlled Trial	Evaluate a QoL-monitor in early breast cancer patients	Early breast cancer patients	113 patients with stage I–IIIB breast cancer treated with chemotherapy	QoL-monitor tool, patient-reported outcomes	Improved quality of life monitoring	Use QoL-monitors in clinical practice
Wu et al.	2024	USA	Integrative Review	Review mHealth apps for cancer pain self-management	Cancer patients	Various studies included in the review	Literature review	mHealth apps improve cancer pain self-management, enhance patient engagement, and provide real-time symptom tracking.	Further research is needed on implementation, usability, and long-term effectiveness of mHealth interventions in pain management.
Coffey et al.	2016	Ireland	Qualitative Meta-Synthesis	Explore cancer survivors' perspectives on self-management interventions	Cancer survivors	Thirteen papers were eligible for inclusion in the meta-synthesis	Meta-synthesis of qualitative research	Identified key themes for self-management : Emotional, social, and practical challenges influence self-management. Supportive interventions must consider patient-specific contexts.	Self-management programs should be tailored to individual emotional and social needs, integrating psychological and peer support.
Yang et al.	2024	China	Scoping Review	Review stepped care models in cancer patients	Cancer patients	14 papers were eligible	Literature review	Stepped care models are effective	Implement stepped care in cancer care

Needs for Breast Cancer Care

Various needs are described among breast cancer survivors, encompassing physiological, psychological, informational, and social domains (Table 2). Many survivors need support in coping with treatment-related symptoms and side effects, including chronic fatigue and pain (Wu et al., 2024). Emotionally, there is a need for psychological support to address issues such as anxiety and depression (Hahn et al., 2023). Informational needs are equally critical, as survivors commonly seek accurate and comprehensive information regarding their diagnosis and treatment options (Lally et al., 2019). Another important factor is social support, as many survivors benefit from peer networks and family participation (Lepore et al., 2019). These needs are often interlinked, highlighting the importance of providing a broad and integrated approach to breast cancer care.

Table 2. Summary of self-management needs in breast cancer care (n=14)

Author(s) and Year	Physical Needs	Psychological Needs	Social Needs	Educational Needs	Explanation
Hahn et al. (2023)	Not specifically addressed	Managing depression.	Emphasized the need for support from healthcare providers to facilitate depression screening.	educating both staff and patientss about depression screening guidelines.	Barriers and facilitators to implementing and sustaining guideline recommended depression screening for breast cancer. The findings highlighted the importance of organizational support, staff training, and patient engagement in effective depression screening.
Singleton et al. (2023)	Encouraged physical activity through regular motivational messages.	Provided psychological support by addressing wellness topics and reducing feelings of isolation.	Facilitated a sense of community among participants through shared experiences.	Access to health and wellness information via SMS	The EMPOWER-SMS program addressed psychological needs and provided educational support to breast cancer survivors during the pandemic.
Singleton et al. (2023)	Weight and dietary changes	Coping with body image issues.	-	Learning healthy lifestyle strategies.	Weight loss interventions addressed physical and psychological needs while educating patients on lifestyle changes.
Lally et al. (2019)	Not specifically addressed	Addressed psychological adjustment, including coping with anxiety and depression.	Investigated the impact of social constraints from family and friends on psychological well-being.	Web-based psychoeducation.	Web-based psychoeducation improved psychological adjustment in breast cancer patients by addressing social constraints and providing education.
Kokts-Porietis et al. (2019)	physical activity	Enhanced motivation and psychological well-being through self-monitoring.	-	Educated participants on the benefits of physical activity and how to use wearable technology	Home-based physical activity interventions using wearable technology addressed physical and psychological needs while educating patients.
Lepore et al. (2019)	Not specifically addressed	Reducing isolation	Peer support in social well-being.	Digital literacy in accessing online support and information.	Internet-based peer support groups improved psychological and social well-being, with digital literacy enhancing engagement.
Wheelock et al. (2015)	Symptom management	Not specifically addressed.	Not specifically addressed	Using web based-system to Provided educational resources on symptom management.	The SIS.NET system addressed physical needs and educated patients on symptom management post-treatment.
Shen et al. (2023)	Dietary Changes	Not specifically addressed.	Not specifically addressed	Acces to healthy food environment	Food environments were crucial for adherence to dietary interventions, addressing physical and educational needs.

Author(s) and Year	Physical Needs	Psychological Needs	Social Needs	Educational Needs	Explanation
Feathers et al. (2015)	Not specifically addressed	Stress reduction	Not specifically addressed	Mindfulness based strategies	Mindfulness-based stress reduction was effective in addressing psychological needs and educating patients on coping strategies.
Lugtenberg et al. (2020)	Managing symptoms and treatment side effects	Coping with anxiety and depression	Support from healthcare providers	Understanding QoL monitoring tools.	The study highlights the use of a QoL-monitor to address physical and psychological needs in early breast cancer patients, emphasizing the importance of healthcare provider support and patient education.
Wu et al. (2024)	Managing cancer pain	Reducing distress related to pain.	Not specifically addressed	Learning to use mHealth apps for pain management	mHealth apps were found effective in supporting cancer pain self-management, addressing physical and psychological needs while educating patients on self-care strategies.
Coffey et al. (2016)	Managing treatment side effects and physical recovery.	Adjusting to life after cancer : Coping with anxiety, depression, and fear of recurrence.	Peer support from family, friends, and support groups.	Learning self-management strategies.	Cancer survivors expressed the need for psychological adjustment and peer support, alongside education on self-management interventions.
Yang et al. (2024)	Symptom management	Reducing anxiety and depression	-	Emphasizes the importance of educating patients about available care options and self-management strategies.	The stepped care model was found effective in addressing physical and psychological needs while educating patients on tailored self-care strategies.

Challenges of Self-Management

Implementing self-management in breast cancer care presents many challenges, particularly in effectively initiating and sustaining self-care practices (Table 3). Some of the main obstacles include limited access to resources, insufficient understanding of effective self-management strategies, and difficulties in establishing supportive relationships with healthcare professionals, as well as emotional concerns such as anxiety and depression (Coffey et al., 2016). Moreover, many survivors experience the burden of multiple symptoms and treatment-related side effects, which can be overwhelming (Terranova et al., 2017). These challenges may be further exacerbated by the ongoing motivation and support required by individuals in palliative care settings, which can be difficult to maintain over extended periods.

Barriers to Successful Self-Management

There are many barriers to the implementation of self-management in breast cancer care (Table 3). Common barriers include practical issues, such as limited access to healthcare services and digital tools (Kokts-Porietis et al., 2019). Fear and anxiety are also significant psychological barriers that may affect survivors’ ability to actively participate in self-care activities (Yang et al., 2025). Social and cultural factors may further complicate the situation, with some survivors experiencing stigma or a lack of community support (Lepore et al., 2019). These barriers highlight the need for tailored interventions that address the specific challenges faced by different groups.

Facilitators of Self-Management

Despite these challenges, several factors can enhance the success of self-management strategies (Table 3). Innovative digital health solutions, including mobile applications and online platforms, can facilitate self-management by providing accessible support and information (Wu et al., 2024). Peer support networks and social groups also serve a crucial function by providing emotional encouragement and practical support that reinforce survivors’ engagement in self-care practices (Lepore et al., 2019). Moreover, individualized and person-centered interventions may be more effective in addressing survivors’ specific needs (Coffey et al., 2016). These facilitators highlight the importance of supportive environments and tailored approaches to enhance self-management.

Table 3. Summary barriers and facilitators of self-management in breast cancer care (n-14)

Author(s)	Barriers to Self-Management	Facilitators of Self-Management
Hahn et al.	Individual-level: Emotional distress (fear, anxiety). Healthcare system: Poor communication with providers, lack of personalized care. Sociocultural-economic: Financial constraints.	Healthcare system: Guideline-recommended depression screening, improved communication.
Singleton et al.	Individual-level: Low health literacy, lack of motivation. Sociocultural-economic: Limited access to technology.	Individual-level: Motivation, self-efficacy. Healthcare system: SMS-based health and wellness programs.
Singleton et al.	Individual-level: Lack of knowledge about dietary and physical activity changes. Emotional distress: Fear of recurrence.	Individual-level: Positive coping strategies, motivation. Healthcare system: Structured weight loss interventions.

Author(s)	Barriers to Self-Management	Facilitators of Self-Management
Lally et al.	Individual-level: Emotional distress (anxiety, depression). Healthcare system: Lack of access to psychoeducation.	Healthcare system: Web-based psychoeducation programs. Individual-level: Improved psychological adjustment.
Kokts-Porietis et al.	Individual-level: Lack of motivation, low self-efficacy. Sociocultural-economic: Limited access to wearable technology.	Healthcare system: Home-based physical activity interventions using wearable technology. Individual-level: Increased engagement through technology.
Lepore et al.	Individual-level: Low digital literacy. Sociocultural-economic: Lack of access to internet-based peer support.	Individual-level: Digital literacy. Healthcare system: Internet-based peer support groups.
Wheelock et al.	Healthcare system: Limited access to symptom management tools. Individual-level: Emotional distress (anxiety, depression).	Healthcare system: Web-based systems for symptom management. Individual-level: Improved engagement and adherence.
Shen et al.	Sociocultural-economic: Financial constraints, lack of access to healthy food environments.	Healthcare system: Dietary modification trials with accessible food environments.
Feathers et al.	Individual-level: Lack of knowledge about genetic counseling. Emotional distress: Fear of genetic testing results.	Healthcare system: Interventions promoting readiness for genetic counseling. Individual-level: Increased knowledge and readiness.
Feathers et al.	Individual-level: Emotional distress (anxiety, depression). Healthcare system: Lack of access to mindfulness-based interventions.	Healthcare system: Mindfulness-based stress reduction programs. Individual-level: Improved emotional well-being.
Lugtenberg et al.	Individual-level: Emotional distress (anxiety, depression). Healthcare system: Lack of personalized care.	Healthcare system: Quality of life (QoL)-monitoring tools. Individual-level: Improved QoL and psychological adjustment.
Wu et al.	Individual-level: Lack of knowledge about pain management. Healthcare system: Limited access to mHealth tools.	Healthcare system: mHealth applications for pain management. Individual-level: Increased self-efficacy and engagement.
Coffey et al.	Individual-level: Emotional distress (fear, anxiety). Healthcare system: Lack of patient-centered care.	Healthcare system: Adjustment-focused self-management interventions. Individual-level: Positive coping strategies.
Yang et al.	Healthcare system: Lack of personalized care, limited access to resources.	Healthcare system: Stepped care models tailored to patient needs. Individual-level: Improved self-management through incremental support.

4. DISCUSSION

This scoping review offers a comprehensive understanding of self-management within breast cancer care, focusing on the needs, challenges, and facilitators of self-care strategies among patients and survivors. These findings underscore the need for interventions that address the physical, emotional, informational, and social dimensions of survivorship in primary care settings. This discussion presents the main findings, compares them with previous studies, explores possible explanations, highlights areas for improvement, and discusses clinical implications and limitations of the review.

Self-management is fundamental to effective breast cancer care, addressing the diverse needs of survivors. It is essential to manage physical issues, particularly treatment-related symptoms such as fatigue and pain, while also providing psychological support for anxiety and

depression (Hahn et al., 2023; Wu et al., 2024). Access to accurate and comprehensive information about diagnosis and treatment is also essential (Lally et al., 2019). Social support, including peer support networks and family involvement, plays an important role in reinforcing self-care efforts (Lepore et al., 2019). The interdependence of these needs highlights the importance of a holistic and integrated approach to breast cancer care.

However, self-management is not without challenges. Limited access to resources for self-care practices, insufficient knowledge of self-management strategies, and emotional problems such as anxiety and depression are common barriers to effective self-management (Coffey et al., 2016; Terranova et al., 2017; Yang et al., 2025). Managing multiple symptoms and treatment-related adverse effects can make self-care even more difficult. Some strategies that demonstrate promise in addressing these barriers include digital health solutions, such as mobile and online applications, peer support, and personalized interventions (Coffey et al., 2016; Lepore et al., 2019; Wu et al., 2024).

SMS messaging and online platforms are among the digital health interventions that have demonstrated potential for providing continuous support and access to important information. These technologies can facilitate access to resources and enhance patient engagement in self-care practices (Singleton et al., 2023; Wheelock et al., 2015). Furthermore, mindfulness-based stress reduction and dietary modification interventions have shown potential benefits for psychological well-being and physical health (Bisseling et al., 2017; Feathers et al., 2015). However, the effectiveness of these interventions may depend on patient engagement and the availability of adequate support systems.

Breast cancer survivors have unmet needs across physical, psychological, informational, and social domains. Quality of life may be improved through structured survivorship care plans. Interventions should be tailored to individual needs and should consider behavioral and contextual factors that may facilitate or hinder self-management behaviors (Van Cappellen-van Maldegem et al., 2024). Barriers to effective self-management include limited access to healthcare, insufficient knowledge and self-management skills, and emotional distress such as fear and anxiety. Emotional distress and lack of support may contribute to difficulties in maintaining effective self-care practices (Shen et al., 2023). These challenges may be addressed through holistic approaches involving education, psychological support, and digital health tools.

The results are consistent with previous studies highlighting the importance of self-management in breast cancer care. Research has consistently indicated the potential benefits of digital health interventions in improving patient engagement and supporting self-management (Singleton et al., 2023; Wheelock et al., 2015). Mindfulness-based stress reduction approaches have also been associated with psychological benefits among breast cancer patients (Bisseling et al., 2017). However, this review extends previous evidence by considering how patient engagement, the quality of support systems, and contextual factors may contribute to self-management outcomes. The identified needs, including symptom management and psychological support, are consistent with findings reported by Wu et al. (2024) and Hahn et al. (2023). The importance of social support, as highlighted by Lepore et al. (2019), further demonstrates the interconnected nature of these needs. This review builds on these insights by proposing the

importance of integrated care models that comprehensively address the challenges faced by breast cancer survivors.

Several factors may explain the variability in self-management outcomes. First, the level of patient engagement may significantly influence health outcomes (Singleton et al., 2023). Second, the quality of support systems, including healthcare providers and peer networks, may influence the successful implementation of self-management strategies (Lepore et al., 2019). Third, individual differences in coping mechanisms, cultural background, and resource accessibility may affect the effectiveness of self-care strategies, reinforcing the need for personalized interventions (Yang et al., 2025).

While progress has been made in the field of breast cancer self-management, several areas require further attention, including the need for consistent measures to assess self-management interventions across studies. Most research evaluates short-term outcomes, making it difficult to determine the sustainability of adherence and its long-term consequences. Future research should also address barriers to self-care experienced by underserved populations, including low-income and diverse groups, to facilitate equitable access to self-care resources (Kokts-Porietis et al., 2019).

Clinical Implications

These findings have several clinical implications. The long-term health needs of breast cancer survivors require comprehensive survivorship care plans that address physical, psychosocial, informational, and social needs. Digital health interventions, including mobile applications and online platforms, should be incorporated into survivorship care plans to improve accessibility and patient engagement (Wu et al., 2024). Further studies should develop intervention strategies tailored to individual needs and preferences, as well as cultural and socioeconomic characteristics. By addressing identified barriers, leveraging supportive factors, and implementing effective self-management strategies, breast cancer care may be enhanced, with potential improvements in both psychosocial and physical quality of life.

Additionally, psychological needs may be addressed through mindfulness-based interventions, while social needs may be supported through peer support networks (Bisseling et al., 2017; Lepore et al., 2019). Interventions should be tailored to individual needs and cultural contexts to increase their effectiveness (Coffey et al., 2016).

Study Limitations

This review has several limitations. First, although efforts were made to conduct a systematic search, database coverage may have influenced the range of included evidence. Second, several included studies had small sample sizes, short follow-up periods, or relied on self-reported outcomes. Third, some studies involved broader cancer survivorship populations; although only relevant findings were synthesized, this may limit breast cancer-specific interpretation. Fourth, heterogeneity in intervention types, outcomes, and study designs limited direct comparison across studies.

Conclusion

This scoping review highlights the interconnected nature of self-management needs, barriers, and facilitators in breast cancer survivorship. Survivors require support for physical symptom management, psychological adjustment, reliable information, and social connection. However, barriers such as emotional distress, low health literacy, limited access to care, financial constraints, and unequal digital access may limit effective self-management.

Healthcare professionals can use the identified facilitators, digital health tools, peer support, individualized education, patient-centered communication, and self-efficacy-building strategies, to design more effective survivorship support programs. Future research should develop and evaluate integrated, culturally sensitive, and equitable self-management interventions that address both individual needs and healthcare-system barriers.

5. ACKNOWLEDGEMENTS

The authors would like to thank STIKep PPNI Jawa Barat for supporting this study.

6. FUNDING STATEMENT

This study was financially supported by STIKep PPNI Jawa Barat.

7. AUTHOR CONTRIBUTIONS

Authors have read and approved the final manuscript.

8. CONFLICT OF INTEREST DISCLOSURE

The authors declare no conflict of interest.

9. DATA AVAILABILITY STATEMENT

Data supporting the findings of this review are available upon reasonable request.

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