



## Systematic Review

# Self-concept problem and inpatient with breast cancer: A scoping review

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### Abstract

**Objectives:** This research aims to find out more deeply about the problems that occur in the self-concept of breast cancer patients.

**Methods:** This scoping review uses guidelines from Arksey and O'Malley. Various databases were used in this search, including Scopus, Medline through EBSCO, ProQuest, Springer Link, and PubMed, to look at self-concept problems in breast cancer patients, published from 2018 to 2024, with the criteria: primary study research that discusses the components of self-concept cancer patients undergoing treatment in hospital. The data included in this scoping review is described using frequencies and percentages.

**Results:** There are 16 articles analyzed, quantitative research (87.6%), qualitative (6.2%), and mixed-method (6.2%). Research about self-esteem (12.5%), body image (43.7%), self-role (6.2%), self-identity (6.2%), self-ideal (6.2%), and mixed (25%).

**Conclusion:** Thus, it can be concluded that the problems experienced by breast cancer patients during treatment can change due to several things, including changes in role, high self-ideals to fulfill their role as a woman, mother, or wife, and changing body shape.

**Keywords:** Breast cancer; femininity; psychosocial oncology; scoping review; self-concept

Breast cancer is the most common disease experienced by women.<sup>[1]</sup> Every year, there is an increase in the incidence rate; it is recorded that the incidence of breast cancer increases by 1.2 million every year.<sup>[1]</sup> The prevalence of new cases of breast cancer diagnosis in 2022 is the second most common type of cancer with a percentage of 11.5% and the fourth highest mortality rate with a percentage of 6.8%.<sup>[2-4]</sup> The number of cancer sufferers continues to increase to almost 20 million

people in 2026.<sup>[5]</sup> One in 18 women develops breast cancer before the age of 80<sup>[6]</sup> and nearly 80% of cancers are detected at an early stage when patients seek oncology treatment.<sup>[7]</sup>

The side effects of the procedures given to breast cancer patients hurt the sufferer.<sup>[8]</sup> Chemotherapy can have long-term effects on breast cancer patients. Patients often complain that it is even objectively clear from 4 months to 20 years post-chemotherapy.<sup>[9]</sup> Patient complaints put pressure on psychosocial problems such

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as self-concept.<sup>[10-12]</sup> Self-concept is an individual's evaluation of himself based on personal experience, including his perception of his abilities and values.<sup>[11,13]</sup> According to Stuart, the self-concept component consists of five components, which are: self-esteem, body image, self-ideal, self-identity, and self-role.<sup>[13]</sup> Several causal factors that can influence self-concept in breast cancer patients, including: cancer diagnosis and the therapy regimen experienced, have an impact that affects the patient both physically and in the perception of breast cancer patients.<sup>[14-16]</sup>

The results of previous research from Heshmati stated that breast cancer patients experience changes in self-concept in two ways: that the body/body image can be a source of fear and also a complete representation of the self. Self-concept also comes from the dissimilarity between the self-ideal and the actual self. This experience disrupts personal identity and also makes one's role in social interactions difficult.<sup>[17]</sup> Apart from that, Ranieri's research results also stated that the main negative impacts on the personal level of individuals suffering from cancer are (life expectancy, body image, self-esteem, and well-being); the secondary impact is in the form of social relationship problems in the form of roles.<sup>[18]</sup>

Factors influencing increased self-concept problems are largely unexplored. Due to the large number of women living with breast cancer and also the increasing incidence of breast cancer, it is very necessary to look at how breast cancer causes psychosocial problems in sufferers.<sup>[1]</sup> A psychosocial problem that often occurs but is not yet complex is discussed, which is changes in self-concept during the cancer experience.<sup>[17]</sup>

This research aims to look more deeply at the problems that occur in breast cancer patients' self-concept. This review is different from other research, which discusses the components of self-concept separately in breast cancer survivors.

## Materials and Method

### Type of Study

This scoping review uses the guidelines for scoping reviews by Arksey and O'Malley<sup>[19]</sup> and also the development of scoping review reporting from Levac, Colquhoun, and O'Brien.<sup>[20]</sup> Scoping reviews are very relevant to see new evidence in systematic reviews without considering the type of previous research design but still using a systematic and rigorous process.<sup>[20]</sup> This scoping review framework is divided into five stages, which are: (a) identifying the research question; (b) identifying relevant studies; (c) selecting studies; (d) charting the data; and (e) collating, summarizing, and reporting the results of the selected studies. Apart from that, researchers also use Preferred Reporting Items for Systematic Review and Meta-Analysis, specifically for scoping reviews to ensure complete and transparent reporting.<sup>[21]</sup> This scoping review has also been registered on

#### What is presently known on this subject?

- Self-concept is a multidimensional issue that consists of several components including: body image, self-esteem, self-ideal, self-role, and self-identity.

#### What does this article add to the existing knowledge?

- The topic of self-concept has not been extensively researched, so this scoping review helps describe breast cancer patients' self-concept-related problems based on all its components.

#### What are the implications for practice?

- The contribution offered from this research for practitioners is to see the psychosocial problems of breast cancer patients, especially self-concept, based on its components. Meanwhile, in the field of education, research development focuses on handling the self-concept problems of breast cancer patients comprehensively.

the OSF website as a project in progress at the address: <https://osf.io/236ns>. Researchers also looked for similarities in studies in several databases such as Cochrane, Prosper, Dare, and OSF. The results of the search found a rarity on this topic.

### Research Question

This research question uses the mnemonic Population, Concept, and Context.<sup>[22]</sup> Patients with breast cancer are the study population, self-concept is the concept, and hospital care is the context. The research question is as follows: "What are the self-concept problems in patients with breast cancer?"

### Selection Criteria

Papers included in this scoping review were assessed using the inclusion criteria:

#### Population

In the study were stage 0-IV breast cancer patients.

#### Concept

Self-concept was the problem discussed.

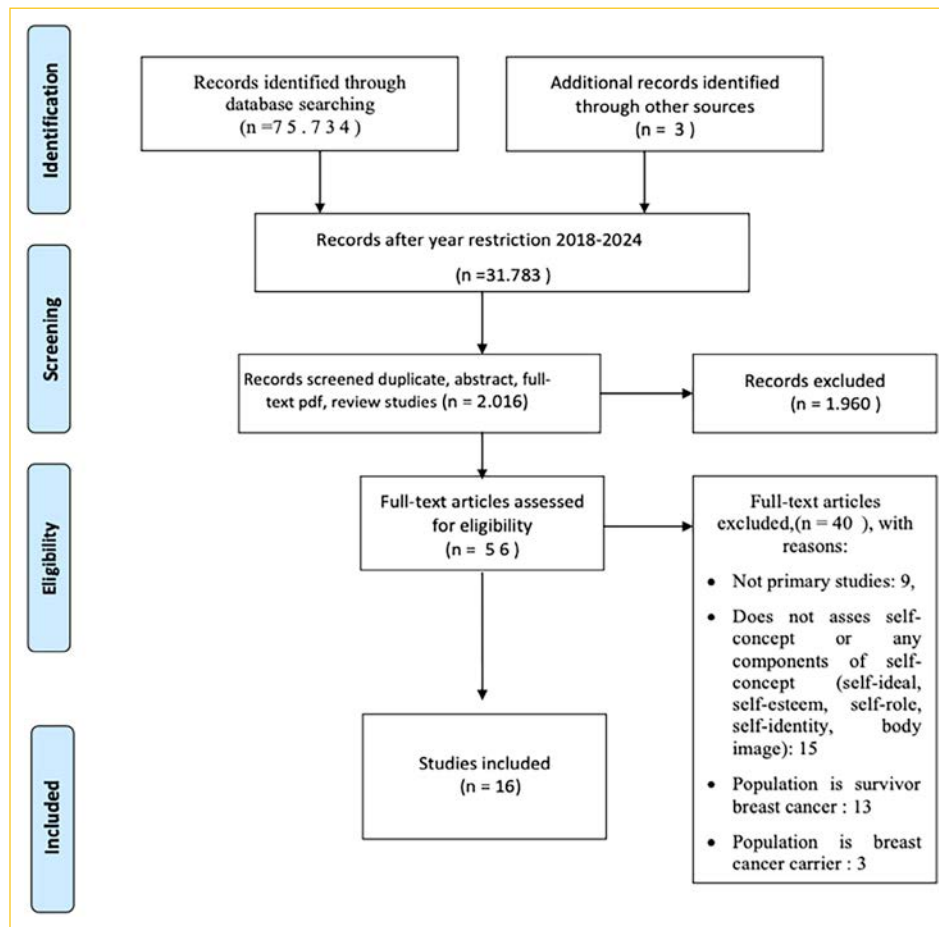
#### Context

The research location was a hospital.

The exclusion criteria used in this research are (a) BRCA carriers, breast cancer survivors, (b) psychometric development research publications, and (c) policy documents.

### Data Processing and Analysis

This research uses a search strategy from the Joanna Briggs Institute which includes three search steps.<sup>[23]</sup> The initial step is a limited search regarding the topic that will be discussed on Google Scholar (preliminary study) in January 2024. Next, the researcher analyzes the text contained in the title and abstract, as well as the use of PICO and keywords that have been used. Based on the preliminary study, relevant terms were obtained (for example: "Ca mammary OR mammary tumor OR breast cancer OR breast tumors OR breast carcinoma OR mammary cancer OR breast malignant OR breast



**Figure 1.** Preferred reporting items for systematic review and meta-analysis flow chart of included studies.

neoplasm OR breast oncology AND self-concept OR self-perception OR psychosocial OR body-image OR bodily self OR self-identify OR self-image OR self-esteem OR self-worth") and have been identified according to the terms used for the scoping review. Next, the main search was carried out in February 2024 using MeSH which had been previously obtained on five databases: which are Scopus, Medline through EBSCO, ProQuest, SpringerLink, and PubMed. Combinations and variations of searches are adjusted to specific search strings from the database limited to 2018–2024. Year restrictions are made to obtain data that are relevant to the current self-concept problems of breast cancer patients. The third step, reviewing the references of the identified articles was searching for additional studies discussing self-concept.

Data charting form used by reviewers to extract information from each article used. Researcher data management uses the help of the Rayyan application in carrying out data selection. Researchers will map out one table, including (1) summary (author, year, country, population, methodology, and outcome measures). This stage is important for mapping the data format and extracting data.

The description of the results that will be explained in this study will explain the picture based on the components of self-concept, including the assessed components of self-concept, factors causing problems with components of self-concept, and signs and symptoms of problems with components of self-concept experienced by the patient. The risk of bias in each article was not assessed for two reasons: (i) critical appraisal of the included studies remains a matter of debate regarding the research methodology of scoping reviews.<sup>[19]</sup> (ii) The articles in this study used a heterogeneous research design.

## Results

Initial screening using MeSH resulted in a total of 75,734 and hand-searching of three articles, then filtered using the year of publication to 31,783. After that, the researchers carried out duplication screening, abstracts, use of Indonesian and English, available in full-text PDF, and non-research publications such as reviews until 56 articles were obtained. Furthermore, the eligibility assessment was based on inclusion and exclusion criteria for 56 articles, resulting in 16 articles being reviewed. The series of literature search activities is explained in Figure 1.

**Table 1. Summary Included study**

Author, year, country	Population	Methodology	Component self-concept measures
United Kingdom <sup>[9]</sup>	50 breast cancer patient	RCT	Self-esteem
Australia <sup>[24]</sup>	152 breast cancer patient	Cross-sectional	Body image
Poland <sup>[6]</sup>	120 women with breast cancer	Cross-sectional	Body image
Brazil <sup>[25]</sup>	103 women with breast cancer	Cross-sectional	Body image
Austria <sup>[26]</sup>	39 patients with primary breast cancer	Randomization	Body image and self-esteem
United States <sup>[5]</sup>	87 breast cancer patients	RCT	Body image
Brazil <sup>[27]</sup>	181 women with breast cancer	Cross-sectional	Self-esteem, body image, self-role
Poland <sup>[1]</sup>	324 breast cancer patients	Cross-sectional	Body image
Turkey <sup>[28]</sup>	150 breast cancer	Cross-sectional	Self-esteem, body image
Switzerland <sup>[2]</sup>	128 breast cancer patients	Cross-sectional	Self-esteem
Croatia <sup>[7]</sup>	68 patients with breast cancer	Cross-sectional study	Body image
Italy <sup>[18]</sup>	The 84 patients included 42 breast cancer patients and 42 skin cancer patients	Case-control	Body image, self-esteem
Berlin <sup>[29]</sup>	325 breast cancer patients	Cohort study	Body image
Iran <sup>[17]</sup>	133 women with breast cancer	Cross-sectional	Self-ideal
Portugal <sup>[30]</sup>	One woman with tumorectomy and radiotherapy	Case study	Personal identity
Switzerland <sup>[31]</sup>	18 breast cancer patients	Cross-sectional mixed-method design	Self-role

RCT: Randomized controlled trial.

The total number of articles reviewed was 16 articles, consisting of 14 quantitative designs, one qualitative study, and one mixed-method study. The results of all these studies tell about the problems related to the components of self-concept. Table 1 provides a summary of the studies included in this scoping review.

### Body Image

Body image issues were researched 43.7% of the time in this review. Women who suffer from breast cancer consider that self-image is the main problem.<sup>[1,5]</sup> Some of the factors that cause negative self-image problems include cancer conditions that are in the late stages or early stages that undergo treatment delays after 2 months of diagnosis. Apart from that, therapy regimens such as chemotherapy provide body image effects in the short term because the patient's body image gradually improves after the effects of chemotherapy disappear. Meanwhile, patients who receive radiotherapy have long-term body image problems.<sup>[1,28,29]</sup> Other treatments for breast cancer patients are breast-conserving surgery (BCS), mastectomy alone (M), and mastectomy with immediate breast reconstruction (MIBR). BCS is offered to patients with mastectomies to reduce body image problems. Body image in M patients tends to recover more quickly compared to MIBR, which tends to get worse over time.<sup>[29]</sup> Additional information in the form of characteristics of breast cancer patients with

body image problems includes low education, women who have just started a romantic relationship, and a job that is related to physical appearance.<sup>[24,25,27]</sup>

Patients with a negative self-image will show body dissatisfaction, evaluate themselves negatively, and be inconsistent regarding treatment.<sup>[5,6,24,26]</sup> Meanwhile, patients with a positive self-image will appear more accepting and have a better quality of life.<sup>[7,25,27]</sup>

### Self-ideal

The problem of low self-ideal is related to high psychological stress.<sup>[18]</sup> The cause of someone's self-ideal problem comes from themselves. Apart from themselves, the most important people in their lives, such as partners and family, want patients to be more tolerant, calm, optimistic, spiritual, and not easily tired, pessimistic, worried, or alone.<sup>[17]</sup>

Patients with self-ideal problems will experience changes in several things, including women's thinking patterns, feelings, and behavior, compared to what they usually did before they were sick.<sup>[28]</sup> Patients with a good self-ideal are expected by breast cancer patients to be more spiritual, cheerful, humble, and full of compassion. However, what happens is that they become weaker, withdrawn, anxious, or depressed. Breast cancer sufferers who are mothers display self-ideals that are in harmony when their mental health and role as mothers are maintained.<sup>[31]</sup>

## Self-esteem

Self-esteem is discussed as much as 12.5% in this scoping review. Self-esteem problems in breast cancer patients usually arise as a result of the side effects of chemotherapy or treatment because they are worried about the bad effects of the diagnosis and treatment they are undergoing.<sup>[2,9]</sup> Other factors associated with the occurrence of self-esteem problems include perception of health, religious beliefs, family support, economic level, and diagnosis of malignant diseases such as cancer.<sup>[27]</sup> Characteristics of patients with low self-esteem problems are young and undergoing radical mastectomy.<sup>[26,27]</sup> Self-esteem problems will impact delays in seeking health services.<sup>[28]</sup> In addition, patients who have good self-esteem show emotional stability and more positive thinking.<sup>[27]</sup>

## Personal Identity

The self-identity component is discussed as much as 6.2% in this scoping review. For some mothers, cancer and cancer treatment interact with their feminine identity along with physiological changes and fertility problems. Mothers discussed various physiological changes resulting from cancer treatment, including mastectomies, drug-induced menopause, weight fluctuations, and hair loss. These changes encourage mothers to consider how their physical problems relate to their sense of femininity. Mothers did not necessarily report that feminine characteristics, such as long hair or breasts, were necessarily feminine, but the process of seeing these attributes change challenged their association with femininity.<sup>[31]</sup> Apart from that, marital status gives them an identity as mothers who are required to play a role in the development process of their children. This requires them to maintain their independence so they can carry out their roles according to their identity.<sup>[29,31]</sup> Patients with identity problems tend to complain about their inability to carry out their duties and obligations as mothers.<sup>[30]</sup>

## The Self-role

The role component of the self was discussed as much as 6.2%. Physical changes after radical mastectomy cause women to have difficulty adapting to their functional activities, dissatisfaction with themselves/their bodies, worsen women's sexuality, fear of rejection from partners, sexual identity, and feelings of motherhood, and also make them change their role as a woman, as a mother and also his role in the family.<sup>[27]</sup> Mothers with cancer expressed feelings of moral obligation to overcome cancer but at the same time also prioritized their children's needs.<sup>[31]</sup> Breast cancer sufferers experience physical, mental, and social impacts due to their inability to carry out their roles and responsibilities in the family and society.<sup>[28]</sup> The role of the self is the most prioritized during cancer treatment. The demands of a mother's role as a parent vary, depending on the child's developmental stage, marital status, and can-

cer prognosis. Mothers who have children under five say that their children are still very physically dependent on their role as mothers and are not aware of their cancer diagnosis.<sup>[31]</sup>

## Discussion

Self-concept is a psychosocial problem related to individual health, self-esteem, self-identity, and body image.<sup>[3,32]</sup> Breast cancer patients undergoing mastectomy report psychosocial and sexual problems.<sup>[33,34]</sup> Patients who are genetic carriers of cancer state that there are changes in their self-perception, in this case, about body image, self-esteem, and self-identity. Multidimensional self-concept is currently still very limited and has not been addressed adequately.<sup>[32]</sup> Cancer patients report low self-esteem due to gender dynamics; breast cancer and its treatment are associated with symptoms that impact physical, social, and mental, especially self-esteem, which is influenced by body changes and short to long-term cognitive function.<sup>[25,35]</sup> Self-esteem, perception, and self-image are important factors in health recovery.<sup>[6]</sup>

Early-stage breast cancer patients experience psychological problems related to death.<sup>[36]</sup> Delays in breast reconstruction treatment also cause patients to experience poor mental health.<sup>[33]</sup> A diagnosis will affect their self-confidence, besides the long waiting period for treatment also makes patients worried about their prospects.<sup>[1,37]</sup> Women who were younger, employed, pre-menopausal, single, low-income, had undergone chemotherapy or surgery, and were highly educated appeared to have poorer body image. Therefore, although better physically, younger women are worse in terms of emotions and body image.<sup>[38]</sup> The results of previous research by Alvarez-Pardo also stated that patient characteristics such as age, education level, and no family history are characteristics that influence self-esteem and body image.<sup>[39]</sup>

Body image and identity issues are interconnected with long-term declines in self-esteem, along with reactions of breast tissue and skin after radiation.<sup>[27,29]</sup> Body image is a problem that occurs as a negative mental perception of an individual's body regarding its appearance and physical function.<sup>[40]</sup> This is a major problem for women who focus on femininity.<sup>[3]</sup> Side effects include forced menopause in young mothers, some of whom have to terminate pregnancies and are infertile, thus disrupting their capacity as mothers/wives. These things influence them in that their self-identity, self-role, and self-ideal are not following their supposed capacities.<sup>[31]</sup> Dissatisfaction with oneself will have an impact on difficulties in building relationships in breast cancer patients because they are afraid of rejection from their partner.<sup>[24]</sup> The problem of self-concept components is related to one component with other components. For example, in breast cancer patients who undergo a mastectomy, their role as a breastfeeding mother has a major impact on their role representation and identity.<sup>[41]</sup>

A positive self-concept allows early-stage cancer patients to control their emotions and thoughts and take concrete and practical actions in the fight against cancer.<sup>[40]</sup> Positive feelings will increase their self-confidence and confidence in facing challenges during treatment.<sup>[2]</sup> Self-concept problems can be treated with several interventions, including supportive cancer care and mind-body therapy, and in breast cancer patients, the main intervention is psychosocial problems.<sup>[9,10,42,43]</sup>

## Conclusion

The problems that breast cancer patients can experience during treatment can change due to several things, including changes in roles and high self-ideals to carry out their roles as women, mothers, or wives. The problem of self-concept components is related to one component with other components. This is a major problem for women who focus on femininity in carrying out their daily lives. This phenomenon of psychosocial problems with self-concept is a problem that is complained about and can be objectively seen clearly.

A positive self-concept allows patients to control themselves and provides the ability to take concrete action during the fight against cancer. The results of research that discuss the role of self and self-identity are still not possible for further research.

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