



Body acceptance in women with breast cancer: A concept analysis using a hybrid model

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ABSTRACT

Background: Women with breast cancer undergo drastic physical changes which can impact their body image. Accepting the altered body has recently been highlighted as the key to body image improvement, however, there is no clear definition or conceptualization of it. This study clarified the concept of body acceptance in women with breast cancer, using a hybrid model.

Methods: In the theoretical phase, the attributes and working definitions of the concept were identified through an extensive literature review. Individual in-depth interviews were conducted during the fieldwork phase to elucidate the concept and verify the attributes derived from the theoretical phase. Finally, in the final analytic phase, the findings were compared and integrated.

Results: The theoretical and fieldwork phases included 20 out of the 579 articles extracted from the literature search and five women who had undergone breast cancer surgery, respectively. Body acceptance was defined as “acknowledging, normalizing, and overcoming changes in body appearance and function caused by breast cancer and its treatment”.

Conclusions: Body acceptance has been identified as a key factor directly related to the overall quality of life. This study provides a theoretical basis for developing effective interventions and consequently facilitates their provision in practice.

1. Introduction

Breast cancer is the most common cancer among women worldwide (Sung et al., 2021). As a life-threatening disease (Akram et al., 2017), cancer is accompanied by various symptoms, such as pain and fatigue (Abrahams et al., 2016; Forsythe et al., 2013), and causes changes in physical function (Stark et al., 2012). Mastectomy, the primary treatment for breast cancer, produces irreversible, permanent, and visible changes in women's breasts, which symbolize femininity, sexual attraction, and motherhood (Koéan and Gprsoy, 2016). Systemic treatments, including chemotherapy or radiotherapy to prevent recurrence and metastasis, also result in physical changes, such as alopecia and skin damage (Sebri et al., 2021).

Drastic physical changes caused by breast cancer and its treatment negatively affect body image (Annunziata et al., 2012). Negative body image among women with breast cancer hinders individual's physical and psychological health (Alhusban, 2019). In addition, it causes changes in relationships with family or partners and social functioning

(Fouladi et al., 2018; Olasehinde et al., 2019), thereby degrading the quality of life. Therefore, the body image of women with breast cancer is highly emphasized as a predictor of overall quality of life (Wu et al., 2019).

Breast cancer survivors adopt various coping strategies in response to physical changes, and their body images varies based on these strategies (Cash et al., 2005). Women who avoid their altered bodies are reluctant to see or touch their breast, limit social situations where body exposure is expected (Alhusban, 2019), and experience body image distress (Przedziecki et al., 2013). In contrast, body image and quality of life have improved in women who accept body realities without denial as they establish new identities (Yamani Ardakani et al., 2020; Pedersen et al., 2017).

Because an individual's way of coping with physical changes plays a decisive role in forming a body image (Yamani Ardakani et al., 2020), body acceptance, which implies recognizing and accepting the altered body as it is, has been highlighted as the key to improving body image (Stewart, 2004). Accordingly, various interventions and related studies

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to promote body acceptance of women with breast cancer have been widely conducted. Consequently, results from such interventions and studies have shown that women’s body image and self-esteem improve (Lewis-Smith et al., 2018).

However, there is no clear definition or explanation for body acceptance in women within the context of breast cancer. Considering that drastic physical changes are expected after the breast cancer diagnosis (Paterson et al., 2016) and that acceptance of the altered body is the key factor in both body image and quality of life (Cash et al., 2005), the concept of body acceptance should be urgently established. Therefore, this study aimed to analyze the attributes and meanings of this concept. This will ultimately improve the quality of life of women with breast cancer by accelerating related research and interventions.

2. Methods

A hybrid model of concept analysis is a method that clarifies the concept by combining the theoretical findings of the literature with empirical observations in the field (Schwartz-Barcott, 2000). Considering that body acceptance has not been theoretically conceptualized thus far, and related studies are insufficient, it is essential to explore the given phenomena in women with breast cancer. Therefore, based on the hybrid model (Schwartz-Barcott, 2000), this study analyzed the concept of body acceptance through three phases: theoretical, fieldwork, and the final analytic phase.

2.1. Theoretical phase

In the theoretical phase, the attributes and working definition of the concept were derived through a literature review, focusing on “how the concept of body acceptance can be defined and measured” as a key question.

2.1.1. Search strategy

The PubMed, CINAHL, EMBASE, PsycInfo, and RISS databases were used for the literature searches. In consultation with the medical librarian, keywords for the literature search were selected: 1) breast neoplasm, 2) body image, and 3) accept* OR adapt* OR adjust* OR copy OR understand* OR understand* OR integrate*. Data were extracted using a combination of keywords by referring to the thesaurus of each database. Because the concept of body acceptance changes with time,

only literature published after the 2000s, from January 2000 to October 2021, was included in the analysis. The inclusion criteria were original research on body acceptance, full-text availability, and peer-reviewed journal articles written in English or Korean.

2.1.2. Search outcome

As a result of the literature search, 579 articles were extracted. After excluding 201 duplicates, 378 articles were screened in the order of title, abstract, and full text to evaluate whether they met the inclusion criteria and whether the characteristics of the concept could be derived. Finally, 20 articles were selected for the concept analysis (Fig. 1).

2.2. Fieldwork phase

In the fieldwork phase, individual in-depth interviews were conducted to clarify the meaning of body acceptance as perceived by female breast cancer survivors, with the concept’s attributes identified in the theoretical phase in mind.

2.2.1. Participants

Schwartz-Barcott (2000) suggested that sample sizes that facilitate in-depth data analysis are more desirable rather than a large number of samples in the fieldwork phase. In addition, it was recommended to interview three to six people who could reveal the given phenomenon if the subject is an individual unit. Therefore, this study aimed to interview five women with breast cancer and recruited participants through an online breast cancer patient community. With the cooperation of the online community manager, a recruitment notice summarizing the research purpose, methods, and participation requirements was posted.

The inclusion criterion was women over 18 years of age who had undergone breast cancer surgery. This study limited subjects to those who have passed more than one year after the completion of standard treatment (chemotherapy and radiotherapy), referring that the study on illness acceptance in chronic disease constrained participants to at least one year after diagnosis (Ko et al., 2021). In addition, those who had undergone surgery or continuous treatment for comorbid diseases other than breast cancer or had a psychiatric history were excluded from the study. Participants’ characteristics expected to affect body acceptance, such as the type of surgery, elapsed period after surgery, and cancer stage at diagnosis, were intended to be evenly included.

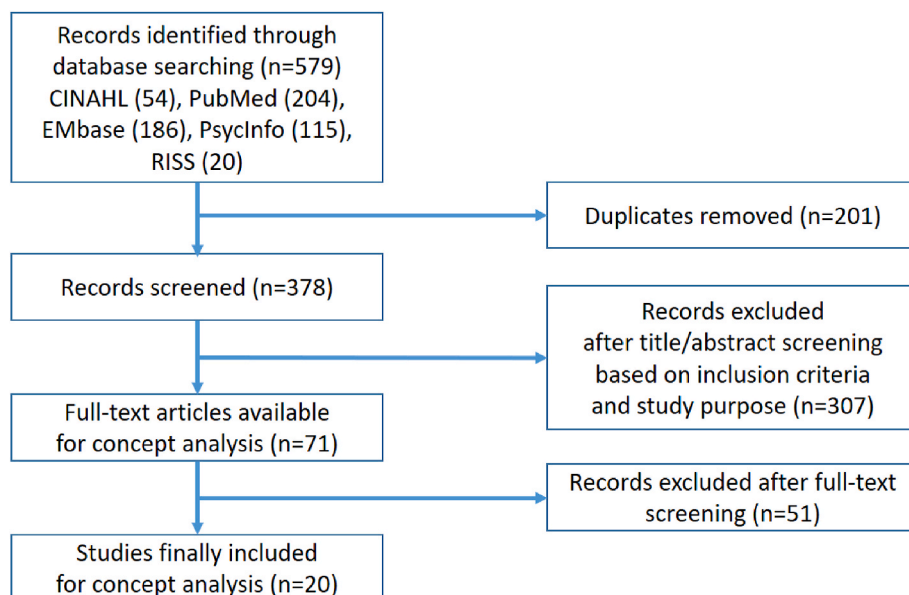


Fig. 1. Flow diagram of literature review.

2.2.2. Data collection

The first author conducted individual in-depth interviews between December 13 and 17, 2021. In consideration of the Coronavirus disease 2019 pandemic, interviews were conducted via zoom. Semi-structured interviews lasted 80 min on average, using interview guides with four main questions: 1) perceptions, emotions, and attitudes toward the altered body; 2) life changes and coping strategies in response to physical changes; 3) the perceived meaning of body acceptance; and 4) antecedents and consequences of body acceptance. All interviews were audio-recorded, with the consent of the participants.

2.2.3. Data analysis

The interviews were transcribed verbatim. In addition, non-verbal expressions reflecting participants' emotions were documented as field notes and referred to in the analysis. Data were analyzed in the following order using a conventional content analysis presented by Hsieh and Shannon (2005).

First, all the data were read repeatedly to have a sense of the whole. Second, words, phrases, and sentences that captured key thoughts were highlighted and labeled to derive codes. Third, the codes were sorted into subcategories depending on their relevance and differences. Fourth, based on the relationships among subcategories, subcategories were compared and combined into upper hierarchical categories. Fifth, definitions were developed for each category and subcategory. Finally, the meaning of body acceptance is illustrated by presenting exemplars for each subcategory reflecting rich content.

2.2.4. Ethical consideration

This study was conducted after obtaining approval from the ethics committee of the researchers' institution (IRB No. Blinded). Subjects interested in this study were asked to contact the researcher directly by referring to the recruitment notice in order to ensure autonomous participation. Prior to the interview, all participants were informed about the purpose and procedure of the study and voluntarily participated with written informed consent. Personal identifiable information was encrypted and kept confidential to maintain anonymity.

2.3. Final analytic phase

The attributes and definitions of the concept of body acceptance in women with breast cancer were confirmed by comparing, analyzing, and integrating the findings derived from the theoretical and fieldwork phases.

3. Results

3.1. Theoretical phase

3.1.1. Definitions of body acceptance

The Oxford English Dictionary (Oxford University Press, 2022) defines "body" as "the whole physical structure of a human or an animal," while "acceptance" refers to "the quality of being willing to accept an unpleasant or difficult situation." Synthesizing these, "body acceptance" can be defined as "a trait that willingly accepts unpleasant or difficult situations in the whole physical structure." Therefore, body acceptance in women with breast cancer can be interpreted as "a willingness to accept changes in appearance or function caused by breast cancer."

3.1.2. Meaning of body acceptance in other disciplines

Studies on physical changes in women with breast cancer have been conducted, but none have explicitly used the term body acceptance. In addition to nursing, psychology and medicine are disciplines where related research has been conducted extensively.

Psychologist K bler-Ross and J uregui (2008) presented a grief model consisting of five stages of "denial, anger, bargaining, depression, and acceptance" as the process of condolences for the loss. Acceptance,

the last stage in the grief model, refers to restoring psychological stability by coming to terms with a given situation. Similarly, by accepting body realities, women with breast cancer could eliminate negative thoughts and emotions (Lewis-Smith et al., 2018) and regain confidence (Kurowecki and Fergus, 2014) while feeling satisfied with their changed bodies (Herring et al., 2019).

Moreover, breast cancer survivors formed new femininity and identity, rejecting sociocultural standards and pressures on the female body (Grogan and Mehan, 2017; Thornton and Lewis-Smith, 2021; Kurowecki and Fergus, 2014). They were proud of scars on the breast as a necessary cost for survival and a sign of victory against cancer (Grogan and Mehan, 2017). In psychology, body acceptance means overcoming difficulties and negative emotions arising from bodily changes by facing, acknowledging, and fully experiencing them.

Meanwhile, medicine focuses on accepting the altered body by prioritizing health over physical changes. Women were relieved that they could detect and treat breast cancer. They highly valued survival (Thomas-Maclean, 2005) and were grateful for regaining health through tumor resection (Fouladi et al., 2013; Olasehinde et al., 2019). In other words, body acceptance in medicine implies a process in which women with breast cancer positively evaluate physical changes by assigning meaning to treatment.

3.1.3. Meaning of body acceptance in nursing

Nursing has viewed body acceptance from the most comprehensive perspective. Women with breast cancer realized that their bodies had irreversibly changed (Freysteinson et al., 2012; Hill and White, 2008), fully experienced negative emotions caused by physical changes, and accepted their loss (Chen et al., 2020). They also positively interpreted the altered body with more meaning to their survival (Ahn and Suh, 2021; Fang et al., 2010) and formed a new identity by breaking away from sociocultural norms (Ahn and Suh, 2021; Chuang et al., 2018).

The most notable difference in utilizing the concept in nursing is that it encompasses accepting not only the psychological distress but also the physical changes itself. As women with breast cancer adjusted to the altered body, they felt comfortable with their physical status (Chuang et al., 2018) and recognized it as normal (Chen et al., 2020). Based on this, they can return to their daily lives and have a positive outlook on their bodies (Ahn and Suh, 2021; Hill and White, 2008).

3.1.4. Definitive attributes of body acceptance identified in the theoretical phase

Three definitive attributes of body acceptance were identified as "acknowledgment," "normalization," and "overcoming." Moreover, each was classified into two categories according to the unit of meaning.

The first attribute, "acknowledgment," includes two categories: "encountering," which perceives the altered body smoothly without psychological distress, denial, or avoidance, and "justification," which accepts physical changes as an inevitable result of breast cancer treatment. The second attribute, "normalization," consists of two categories: "adaptation," which involves feeling comfortable and familiar with the altered body, and "return to daily life," which means performing daily life activities just like before breast cancer diagnosis. Finally, the third attribute, "overcoming," includes two categories: "successful transition," which is satisfied with the altered body and rebuilds a new physical identity, and "being optimistic," which entails having a positive outlook on the body.

3.1.5. Working definitions of body acceptance identified in the theoretical phase

By synthesizing the attributes identified in the theoretical phase, body acceptance in women with breast cancer was defined as "acknowledging, normalizing, and overcoming changes in body appearance and function caused by breast cancer and its treatment."

3.2. Fieldwork phase

3.2.1. General and disease-related characteristics of participants

Five women with breast cancer participated in interviews during the fieldwork phase (Table 1). The mean age of the participants was 44.40 years, and all except one of them, who was 50 years old, were in their 40s. All the participants were college graduates, and three of them were religious. Two out of the five participants were employed, and the perceived socioeconomic status was identified as four in the middle and one in the low. All the participants were married and had at least one child.

The cancer stage at diagnosis was evenly distributed from Stage 0 to Stage II. The types of surgery varied among participants: two underwent a breast-conserving operation, one had a mastectomy without reconstruction, and the other two underwent a mastectomy with immediate breast reconstruction. At the time of the interview, the median postoperative elapsed period was 4.20 years, ranging from a minimum of 1 year to a maximum of 10 years. The participants received treatments, such as chemotherapy, radiotherapy, endocrine therapy, and targeted therapy, depending on the subtype and stage of cancer.

3.2.2. Meaning of body acceptance derived from the fieldwork phase

The meaning and degree of body acceptance perceived by the participants varied. As a result of analyzing transcription data using conventional content analysis methods, eight subcategories were derived, which were then integrated into three categories with more abstract and comprehensive meanings.

Category 1. Confronting and acknowledging the reality of the altered body

1 Encountering the altered body wholeheartedly

Among the various physical changes caused by breast cancer and its treatment, the most significant change the participants encountered was breast resection. Although the degree of change perceived by each person was different, all participants experienced alterations in the appearance and sensation of the breast after surgery. For participants, seeing and touching the operated breast sometimes causes emotional pain. However, participants who did not avoid or turn away from physical changes faced the changed body naturally without fear and upset.

Honestly, I hated showering for a while because I must take off my clothes, look in the mirror, and wipe my body. Initially, I could not even touch it. But now, I keep touching and massaging my empty breast to embrace my body. (Patient No. 5)

2 Understanding physical changes as a treatment process

In addition to breast resection, the participants experienced treatment-related changes in appearance, such as hair loss and skin pigmentation. Some women experienced tremendous distress, as unbearable as the treatment itself. Moreover, various symptoms occasionally appeared, including pain, fatigue, lymphedema, and menopausal syndrome. However, as breast cancer treatment was an inevitable choice for survival, participants understood the given reality by accepting drastic body changes as a result that had already been expected.

Actually, I am not that reluctant to look at my operated breast. I just think, like, “Who cares? I got surgery not because I did something bad but because I was sick.” (Patient No. 1)

I heard that pain or fatigue might be experienced after chemotherapy. So, I am accepting it as “this is just an aftereffect of the treatment.” (Patient No. 3)

3 Soothing one’s distress

The participants explored their bodies again, while valuing survival and health more than physical changes. Although the breast was deformed, women consoled themselves that they were freed from the risk of recurrence or metastasis as the cancer was also eradicated. In addition, participants were grateful that the physical changes were not as significant as they had previously anticipated, and even regarded it as “fortunate that it’s just to this extent” by comparing it to others who suffered more. This way, participants comforted their hurt minds by positively interpreting the given situation.

If this is the result of cosmetic surgery, it is a big problem for which the hospital needs to be held accountable. However, it was a matter that was directly related to my life, so I accepted it, thinking, “though, it has shaped the part that was supposed to be cut out because of cancer surgery.” (Patient No. 4)

When I meet patients around me, I think, “Oh, she is that sick. I am glad I am not that sick.” (Patient No. 2)

Theme 2. Resuming daily life in harmony with the altered body

Table 1
General and disease-related characteristics of participants in the fieldwork phase.

Categories	Participant No.				
	1	2	3	4	5
General characteristics					
Age (year)	43	45	44	40	50
Education	College	College	College	College	College
Religion	None	Buddhism	Buddhism	None	Christian
Employment	Employed	Employed	Unemployed	Unemployed	Unemployed
Perceived SES	Middle	Middle	Middle	Low	Middle
Marital status	Married	Married	Married	Married	Married
Number of children	2	1	2	1	2
Disease-related characteristics					
Cancer stage	0	2	2	1	0
Type of surgery	Rt. BCO	Rt. BCO	Rt. BR	Lt. BR	Rt. MRM
Postoperative period (year)	10	2	5	3	1
History of treatments	RTx, HTx	RTx, CTx	CTx	CTx	HTx

BCO = breast conserving operation; BR = mastectomy with breast reconstruction; CTx = chemotherapy; HTx = hormone therapy; Lt = left; MRM = modified radical mastectomy; Rt = right; RTx = radiotherapy; SES = socioeconomic status.

1 Learning ways to live with one’s altered body

The participants devised their strategies in response to their altered physical conditions. When physical strength decreased or symptoms appeared due to the progression of cancer and side effects of treatment, they adjusted the level of activity so that the body did not strain. In addition, women utilized accessories, including underwear, wigs, or hats, to compensate for noticeable changes in appearance, such as breast deformation and hair loss. Thus, the participants learned and practiced a new way of living in person.

Considering my physical condition, I try to refrain from extreme exercise and replace it with walking or other activities. I have lymphedema, so I perform arm exercises regularly and check the difference between both arms every evening after the shower. (Patient No. 3)

I prepared my heart for hair loss before initiating chemotherapy. After my hair fell out, I tried to find out how to make it more natural, rather than being sad about “Why did I become like this?” (Patient No. 1)

2 Feeling comfortable with physical changes

As participants got used to the altered body, the discomfort following physical changes also decreased. In particular, as women became numb to changes in the appearance and sensation of their breasts, the time they were unconscious that they had undergone breast cancer surgery lengthened. Participants expressed they were accustomed to their bodies to the extent that “I forget I am a breast cancer patient,” if there were no physical symptoms, such as intermittent pain.

When I did not feel pain, I thought there was no discomfort. Only when I could not lift something heavy did I think, “Oh, right. I had breast cancer surgery.” Then, after a while, I forgot about it again, so I think I have accepted my body well. (Patient No. 4)

3 Returning to one’s ordinary life

Despite the restrictions caused by physical changes, participants’ lives continued. Although this was not the same as before, the participants returned to their daily lives. Despite the large and small difficulties, participants evaluated themselves as able to perform their roles and functions like others. As daily life, which seemed to change entirely due to physical changes, gradually regained stability, the participants began to recognize their bodies as normal.

Compared to the past, it has only changed almost externally, and there is no inconvenience in activities or life. Now that I can do everything I used to do like others, so I think, “I am the same as anyone else.” (Patient No. 5)

Theme 3. Embracing bodily changes and designing a healthy future
1 Regaining confidence and being satisfied with one’s body

The participants appreciated their bodies, focusing on what they could still do rather than what they had lost due to physical changes. As women regained confidence regarding their bodies, they became unconscious of how others would perceive them. Participants no longer tried to hide their changed bodies, but naturally appeared in front of others. In addition, women were satisfied with their physical condition, deviating from the sociocultural standards for women’s bodies that they had idealized before cancer diagnosis.

Actually, I do not feel my scar is ugly but more thankful. I do not think it is terrible, so I can talk freely about it rather than hide it. (Patient No. 1)

Before I developed breast cancer, I seriously considered breast augmentation surgery. In the past, appearance and breast size were important to me. However, now it does not matter at all. I think, “It’s okay as it is.” (Patient No. 2)

2 Taking care of the body consistently for a healthier future

Participants who realized the importance of health through illness experience began to pay attention to their bodies and actively managed them. While improving their lifestyle, some participants expressed that they felt “rather healthier” than before their breast cancer diagnosis. Participants recognized breast cancer as a threat to their lives and an opportunity to leap into a healthier future simultaneously. Participants designed a new life by practicing health-promoting behaviors through a positive outlook on their bodies.

I used to say, “I am glad I got breast cancer.” Thanks to breast cancer, I have regular check-ups like this, which makes it easier to screen and treat any other disease in the long term. Therefore, I believe that “Breast cancer is not necessarily bad, because it will lead to a healthier life.” (Patient No. 1)

I think I am working hard. I strictly control my diet and exercise daily. So my close friends say, “You are incredible to manage your health like it in a textbook way.” (Patient No. 5)

3.3. Final analytic phase

3.3.1. Comparison and integration of findings from theoretical and fieldwork phases

The three attributes identified in the theoretical phase, “acknowledgment,” “normalization,” and “overcoming,” were similarly derived in the fieldwork phase as “confronting and acknowledging the reality of the altered body,” “resuming daily life in harmony with the altered body,” and “embracing bodily changes and designing a healthy future.” In detail, six categories, two each from three attributes, were identified in the theoretical phase, and eight subcategories were derived from

Table 2
The result of the concept analysis at each phase.

Theoretical phase	Fieldwork phase	Final analytic phase
Acknowledgment	Confronting and acknowledging the reality of the altered body	Acknowledgment
Encountering	Encountering the altered body wholeheartedly	Encountering
<u>Justification</u>	Understanding physical changes as a treatment process <u>Soothing one’s distress</u>	<u>Understanding</u>
<u>Normalization</u>	<u>Resuming daily life in harmony with the altered body</u>	<u>Normalization</u>
Adaptation	<u>Learning ways to live with one’s altered body</u> Feeling comfortable with physical changes	Adaptation
Return to daily life	Returning to one’s ordinary life	Return to daily life
<u>Overcoming</u>	<u>Embracing bodily changes and designing a healthy future</u>	<u>Overcoming</u>
Successful transition	Regaining confidence and being satisfied with one’s body	Successful transition
<u>Being optimistic</u>	Taking care of the body consistently for a healthier future	<u>Leap into the future</u>

Note. Underlined text indicates the differences or changes among the theoretical, fieldwork, and final analytic phases.

three categories in the fieldwork phase (Table 2).

Based on the attributes of the theoretical phase, “encountering,” a subcategory of the first attribute, “acknowledgment,” was identified as “encountering the altered body wholeheartedly” during the fieldwork phase. In addition, “justification” in the theoretical phase was identified as “understanding physical changes as a treatment process” in the fieldwork phase. In a similar context, “soothing one’s distress” emerged from the fieldwork phase. These were integrated and revised as “understanding.”

The second attribute of the theoretical phase, “adaptation,” a subcategory of “normalization,” was identified as “feeling comfortable with physical changes” during the fieldwork phase. In the fieldwork phase, “learning ways to live with one’s altered body” was added as a response to body change, and it was integrated into “adaptation” in consideration of the similarity of the contents. The “return to daily life” in the theoretical phase was confirmed as “returning to one’s ordinary life” in the fieldwork phase.

“Successful transition,” a subcategory of “overcoming,” the third attribute of the theoretical phase, was identified as “regaining confidence and being satisfied with one’s body” during the fieldwork phase. On the other hand, in the theoretical phase, “being optimistic,” indicating a positive outlook for the body, was identified. In response, “taking care of the body consistently for a healthier future” was derived in the fieldwork phase, which practices health promotion behaviors based on positive prospects. Considering the comprehensiveness of the contents, these were integrated and revised as “leap into the future.”

3.3.2. Final attributes of body acceptance

The results were derived by comparing and synthesizing the attributes and meanings of body acceptance identified in the theoretical and fieldwork phases. The attributes and categories of body acceptance confirmed during the final analytic phase are listed in Table 3.

3.3.3. Final definition of body acceptance

Based on the above analysis results, body acceptance among women with breast cancer was defined as “acknowledging, normalizing, and overcoming changes in body appearance and function caused by breast cancer and its treatment.”

4. Discussion

This study applied Schwartz-Barcott and Kim (2000)’s hybrid model to clarify the concept of body acceptance and to understand the given phenomena in the context of breast cancer. Through the theoretical, fieldwork, and final analytic phases, it was defined as “acknowledging, normalizing, and overcoming changes in body appearance and function caused by breast cancer and its treatment.” In other words, the body

Table 3
Attributes of body acceptance in women with breast cancer confirmed in the final analytic phase.

Attributes	Categories	Description
Acknowledgment	Encountering	Perceiving the altered body smoothly without psychological distress, denial, or avoidance
	Understanding	Consoling oneself by accepting physical changes as a process of breast cancer treatment
Normalization	Adaptation	Coping with physical changes properly and feeling comfortable with the altered body
	Return to daily life	Performing daily life without restrictions due to physical changes
Overcoming	Successful transition	Restoring confidence in the body and embracing the altered body
	Leap into the future	Actively managing body with a positive outlook on the body

acceptance of women with breast cancer implies encountering and understanding the body realities resulting from disease and treatment, returning to daily life by adapting to physical changes, and leaping into a healthier future through a successful transition to the altered body.

Cash et al. (2005) presented positive rational acceptance as a coping strategy in response to body image distress. This means embracing challenging events with positive self-care or rational self-talk instead of avoiding body image threats or concealing perceived defects. Sandoz et al. (2013) proposed the concept of body image flexibility, which refers to the whole and intentional experience of perceptions, thoughts, beliefs, and emotions regarding one’s body, rather than trying to alter it. As such, the concepts related to body acceptance developed in general population tend to be limited to “acknowledgment” among the attributes derived in this study.

However, body acceptance among women with breast cancer implies adapting to the altered body and actively managing it beyond allowing psychological distress (Chuang et al., 2018). These results can be interpreted in relation to the fact that body image alteration in cancer patients is not due to distorted perceptions of the shape and size of the body, as in the general population (Thompson and Stice, 2001), but is the result of actual physical changes caused by disease and treatment (Fingeret et al., 2014). In other words, not only acknowledging negative perceptions of the body but also normalizing and overcoming body realities is a key factor in body acceptance.

Meanwhile, in studies on illness acceptance in general and chronically ill adults, disease experience and management, such as understanding disease, overcoming limitations, and designing a new life through self-care, were confirmed as core attributes (Ko et al., 2021; Zheng et al., 2019). Similarly, the concept of body acceptance in women with breast cancer also includes elements of illness acceptance due to experiences of fatal diseases. However, this study also connotes acknowledging and compensating for the changes in appearance and restoring self-confidence. This reflects the disease-specific nature of breast cancer, which is accompanied by visible and irreversible changes in the body parts that symbolize sexual attraction and motherhood (Koëan and Gbrsoy, 2016).

In summary, body acceptance of women with breast cancer is a concept that encompasses accepting changes in body appearance and function caused by disease and treatment. It has unique properties that distinguish it from adjacent concepts, such as body acceptance of the general population or illness acceptance of patients with chronic diseases. To date, conceptualization related to physical changes in the oncology sphere has mainly focused on negative body images (Lehmann et al., 2015). In a situation where interest in positive body images has recently increased and related research has begun to emerge (Thornton and Lewis-Smith, 2021), this study examining body acceptance is considered timely.

4.1. Limitations

The literature search in the theoretical phase was rigorously conducted; however, it was restricted to articles written in English or Korean. This may have omitted the meaningful information associated with body acceptance in women with breast cancer. The number of participants in the fieldwork phase was determined based on suggestions regarding the sample size of the hybrid model (Schwartz-Barcott, 2000). Although the findings of the interviews emerged from relatively small samples, the authors determined that it was sufficient to reach saturation for qualitative analysis and provide insights into the concept of body acceptance.

4.2. Implications for research and clinical practice

This study is of great significance because it conceptualized body acceptance by reflecting the unique characteristics of women with breast cancer, rather than simply borrowing concepts developed in other

populations or disciplines. One thing to note is that, contrary to conventional wisdom, body acceptance is not a consecutive process in a specific order from “acknowledgment” to “overcoming,” and that a certain period does not guarantee body acceptance. Therefore, exploring an individual’s unique body experience is essential rather than assuming it to be uniform. This will ultimately improve the quality of life of women with breast cancer by providing useful information for devising tailored interventions to promote body acceptance.

5. Conclusion

This study derives the definition and attributes of the concept of body acceptance by applying a hybrid model. As a result of conceptual analysis, body acceptance among women with breast cancer was defined as “acknowledging, normalizing, and overcoming changes in body appearance and function caused by breast cancer and its treatment.” In the context of breast cancer, body acceptance has been identified as a vital factor directly related to psychological and physical health and quality of life.

These results broaden our understanding of a given phenomenon and provide a theoretical basis for future research. Further studies exploring the factors influencing body acceptance are required to develop effective strategies for relevant interventions.

Author contributions

Jeonghee Ahn: Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – Original draft **Eunyoung E. Suh:** Supervision, Funding acquisition, Project administration, Writing – Review & Editing.

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Declaration of competing interest

The authors have no conflicts of interest to disclose.

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