

研究報告

Concept Analysis of “Body Image” in Japanese Patients after Mastectomy

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Purpose: To explore concept of “body image” for patients who underwent mastectomy due to breast cancer.

Data Synthesis: We used Schwartz-Barcott and Kim's hybrid model for concept analysis.

Result: From the literature review, the studies investigating “body image” in patients after mastectomy due to breast cancer were explored factors that influenced the change process; these factors included age, marital status, occupation, and emotional state. Patients appear capable of “avoiding confusion of body image on their own” through transforming their own “body image” . Images could be modified to avoid confusion, promote acceptance, and further integrate notions of self- concept and quality of life. Also, in the Fieldwork Stage, the following four core categories were extracted: [The image of the body], [Body perception], [Self-assessment] and [Actual actions]. At the Analysis Stage, the big difference weren't identified among these concepts.

Conclusion: Body image reflected changes in individuals' physical condition due to treatment and judgments based on their own physical perceptions through accompanying behaviors. Images could be modified to avoid confusion, promote acceptance, and further integrate notions of self-concept and quality of life.

Keywords: Body image, breast cancer after mastectomy, concept analysis, Japanese body image.

Problem Identification

According to demographic statistics published by the Ministry of Health, Labour and Welfare in 2014, the number of deaths due to breast cancer has been increasing, and 1 out of 12 Japanese women appears to have breast cancer. Treatment for breast cancer in Japan is considered to be lagging behind by a decade compared to Western countries. However, there are few diseases for which surgical treatment has shown a dramatic transition in the 100 years. Wataya (2010) reported that no less than 69% of surgical treatments in 1960 were regular mastectomies with axillary dissection, which involves performing resections of the subcutaneous fat, major and minor pectoral muscles, thoracodorsal nerve, and blood vessels following large skin excisions. However, the standard procedure for preserving arm motor function and reducing cosmetic losses was the pectoral muscle-preserving radical mastectomy (i.e., “modified radical mastectomy”), while in the late 1980s, the lumpectomy began to be performed (Wataya, 2010). During that same time period, breast reconstruction was added as an option. These rather drastic changes in surgical procedures for breast cancer has left a population of patients with numerous different types of physical scars.

Nursing studies on “body image” became popular during the 1990s, when the concept of the nursing diagnosis was introduced in the nursing diagnosis handbook published by the North American Nursing Diagnosis Association (NANDA-International, 2015).

One of the diagnostic labels is “disturbed body image.” In hospitals, the introduction and utilization of nursing diagnostic systems in medical charts has helped nurses evaluate patients with a common language. For nurses, “body image,” a concept accompanied by a disease and its treatment, is considered important and should not be disregarded.

However, currently, due to the lack of nursing interventions that aim to change patients’ body image, nurses on the job tend to feel that they lack knowledge and confidence in addressing changes in body image (Otsuki, Tsuruta, Numasaki, & Inokoshi, 2011), and find it difficult to actually perform this care (Hase, 2011). Although nurses have become able to comprehend patients’ states using common language, the rather recent introduction of nursing diagnosis and lack of interventions targeting body image have made it difficult for nurses to understand this concept in actual practice; this situation has persisted for at least last 20 years. Therefore, we thought it might be useful to conduct a concept as it can help to clearly define ambiguous concepts in relation to nursing phenomena.

This study reviews the concept of “body image” for patients who underwent mastectomy due to breast cancer. Furthermore, the usefulness of the concept was considered for nursing interventions of body image.

Approach to Concept Analysis

The concept analysis was conducted using the hybrid model proposed by Schwartz-Barcott and Kim. The hybrid model is characterized as it emphasizes on what sense the concept is applied in practice. The hybrid model comprises three stages: the theoretical stage, fieldwork stage, and analysis stage. In the theoretical stage, concepts of interest are identified through a literature review, and a theoretical definition is created. Then, in the fieldwork stage, the applicability of the theoretical definition is evaluated through fieldwork. Finally, in the analysis stage, the concepts identified through the theoretical and fieldwork stages are integrated. Through this analytical method, the concept of interest is defined and polished.

Data Sources

In the theoretical stage, only studies with Japanese subjects were reviewed because body image is strongly influenced by culture (Yasuda, 2014). The literature was conducted search using the keywords “breast cancer,” “post-mastectomy,” “body image/body configuration,” and “QOL” in the Ichu-Shi Web and Japan Medical Abstracts Database, from 1999 to 2016. In the fieldwork stage, I conducted observation of three patients who had received a mastectomy because of breast cancer, and performed the conceptual identification based on their cases. Furthermore, the semi-structured questionnaires was created based on the theoretical definitions obtained in the previous stage, and three patients were interviewed using it. All fieldwork was conducted from March to April 2016 in the facility of a patient association that was unaffiliated with a particular medical institution.

Data Analysis

In the analyses of the fieldwork stage, these data from the audio recordings of the interviews and field notes were used. First, several themes were identified by paying attention to the contents and contexts related to body image and those that appeared to reflect positive attitudes. These lines were coded to elucidate the meaning of the data. Subsequently, I repeatedly compared differences between codes and classified similar ones, ultimately creating categories. Finally, in the analysis stage, the results of theoretical and fieldwork stages were integrated into a coherent concept.

Ethical Considerations

This study was conducted with the approval of the Kansai University of Nursing and Health Sciences ethics committee. I explained the objective of the study and privacy policy (i.e., that nobody referred to in the interviews, including participants, would be identified,

either verbally or in writing to participants). Furthermore, I explained that the participants could freely withdraw from the study at any point, either by verbally or by writing indicating their desire. Each interview was audio-recorded with participants' consent.

Evaluation of Findings

Theoretical Stage (Literature Review)

Four types of studies were retrieved concerning the “body image” of patients with breast cancer: studies focusing on the transformative process of acquiring a new body image; studies describing interventions to facilitate the transformation of body image; studies that used body image as one of the independent variables; and studies that included body image as an aspect of a different concept. The literature was reviewed from these four perspectives in the sections below.

Studies focusing on the transformative process of acquiring a new body image.

These studies included those that studied that factors identified for transforming patients' body image. Fujisaki is a pioneer of body image research in the Japanese nursing field. She developed the Body Image Assessment Tool (BIAT) as a comprehensive measure of body image. Fujisaki defined “body image” as *“the judgment of one's physical condition as a result of comparison with the ‘expected configuration’, and it is an idea formed through the process of perception and evaluation of actual physical condition”* (Fujisaki, 1996). In other words, it is one's gross recognition of the body formed through the interaction of three constructs: physical perception, expected physical condition, and physical evaluation (Fujisaki, 1996).

Hagiwara (2009a) clarified the factors influencing body image transformation using the BIAT in 30 patients with breast cancer hospitalized for surgery, operationally defining

“body image” as “*self-image about the body.*” Furthermore, Hagiwara defined “transformation of body image” as “*changes in self-image due to the influence of preceding requirements such as age, marital status, occupation, and surgical method*” (Hagiwara, 2009a) . In another study, Hagiwara (2009b) investigated the transformation of body image, “emotional status,” and their relationship in another 30 patients with breast cancer. In that study, they defined “transformation of body image” as “*changes in self-image due to factors such as emotional status*” (Hagiwara, 2009b) , while employing the same definition of “body image.”

Saito, Fujino, and Koshizuka (2002) investigated the changes in body image in patients with breast cancer before and after surgery without operationally defining their terms. They did, however, mention that “*body image is an individual’ s personal feelings about [his or her] own body, which is the result of [his or her] own emotion, sensation, and assessment. It changes over time with experience and the situation at hand*” . Saito et al. further showed that age, marital status, occupation, and surgical procedure were related to body image by using a self-administered questionnaire based on the BIAT.

All studies introduced above conducted quantitative analyses, whereas Fujisaki (2002) investigated changes in body image through fieldwork. Fujisaki discussed how people deal with changes in physical condition and body image after sudden changes in their body due to disease or surgery. She reported that patients made use of various strategies, such as denial, ceremonies for taking a last look at the breast that they will lose and bidding farewell; searching for reasons to convince themselves that there is nothing they can do about the situation they are in; postponing body image problems when they must undergo surgery for life-threatening cancer; personal intake of ever-changing somatic

sensations that they have gathered to create a positive story of recovery from illness and damage; and the repeated rewards of affirmative feedback from others through receiving words of approval, praise, and comfort before the surgery. They further integrated these strategies into a “story of recovery” to create a positive body image (Fujisaki, 2002) . Thus, although reactions similar to the “disturbed body image” in nursing diagnosis did occur in Japanese patients, many patients could avoid it through developing and strengthening their story of recovery.

Studies about interventions to facilitate transformation of body image.

These included studies that conducted interventions specifically aimed at transforming patients’ altered body images due to cancer treatment, and discussed their effectiveness. Two studies investigated the suitability of a breast pad with an ice pack or silicon (Abe, Kuroda, & Baba, 2010; Ono, 2011) , and both studies defined “body image” based on past studies. They measured satisfaction with the breast pad using a 5-point scale. The study using the breast pad with silicon also interviewed patients about breast adjustment and body image concerns, which included “I feel like my femininity has decreased,” “I am not confident in myself,” “I am afraid of others’ gazes,” and “I am reluctant to go out.”

Studies using body image as an independent variable.

Only one study fit this classification: it investigated nurses’ recognition of the necessity of certified nurses for breast cancer nursing and its research, and “support for transformation of body image” was included as a related factor (Tokuse et al., 2004) . This was one role that certified breast cancer nurses were expected to fulfill.

Studies that included body image as an aspect of a different concept.

These studies defined body image as an aspect of concepts

such as quality of life (QOL), self-concept, stress, and attitude. Bansho et al. (2010) investigated factors related to changes in QOL before surgery and when returning to daily activities after discharge among patients diagnosed with breast cancer, and reported that *“Even though a decline in QOL during a few weeks after surgery indicated the tendency to hesitate by the change of body image related to surgical wound and deformation, it identified that there was a small impact of ‘side effects of treatment’ and ‘clothes, personality, others’, and a big impact of ‘physical symptoms and pain’”*.

Nakagaki and Okamitsu (2013) investigated attitudes toward daily living under outpatient radiotherapy among patients who had breast-conserving surgery, and their qualitative inductive analysis identified a category of “discomfort due to changes in body image,” which related to patients’ recognition of their condition. Sunaga and Futawatari (2008) investigated how self-concept changed from onset of cancer and the meanings of the breast reconstruction among patients with breast cancer who decided on secondary breast reconstruction, and showed that *“deformation and loss can largely affect body image”*.

Nukui (2003) clarified the stress coping of patients with planned mastectomy, and discussed, based on past literature that *“patients lose a breast, which is considered as symbol of their femininity, due to mastectomy. Thus, it has large impact on the transformation of body image, and many patients experience a loss of value as a female”*. This suggests that change in body image is a stress factor.

Notably, while these studies used the term “body image” based on past literature, they did not provide an operational definition of the term. Body image has received attention in numerous academic areas, such as psychology, surgical anatomy, and psychiatry. In nursing, Roy (2011)

explained the concept as *“Views about their own body. Views about one’s personal appearance.”* In the Roy adaptation model, the concept of “person” comprises two subcategories—the physical and personal self. The physical self in turn includes two constructs: physical sensation and body image. The latter further comprises assessment of physical existence, including physical demographics, functioning, sexuality, health–disease condition, and appearance of the person. Thus, the concept of body image appears to encompass the self-concept.

In order to fully understand the concept of “body image,” its relationships with other concepts were clarified. Regarding its relationship to QOL, I can refer to the WHOQOL26, which was introduced in 1997 and comprises physical, psychological, social, and environmental domains (Tasaki & Nakane, 2013). Body image is included in the psychological domain, which suggests it is best defined as a sub-concept of higher-order concepts such as QOL and self-concept. To improve these higher-order concepts, nurses seek to address the various items of sub-concepts. Importantly, the higher-order concept can be maintained even when one item of the sub-concept worsens, so long as the other items in the sub-concept are improved.

Summary. From the literature review above, the following points were extracted.

1. Two research approaches are used to investigate “body image” in patients after mastectomy due to breast cancer: quantitative analysis using body image measures and qualitative inductive analysis using fieldwork. For body image measurements, most self-administered questionnaires were based on the BIAT. For the assessment of other emotional conditions, the Profile of Mood States was typically used.
2. The studies investigating “body image” in patients after mastectomy due to breast

cancer explored factors that influenced the change process; these factors included age, marital status, occupation, and emotional state.

3.Studies tend to consider “body image” as a sub-concept of higher-order concepts such as QOL, self-concept, and stress.

4.Patients appear capable of “avoiding confusion of body image on their own” through transforming their own “body image.”

Operational definition of terms. Based on my literature review, the following definitions of body image were drawn: *“Self-image about the body,” “the judgment of one’s physical condition as a result of comparison with the ‘expected configuration’ , and it is an idea formed through the process of perception and evaluation of actual physical condition”* as well as “it can be changed and modified” and “it is based on avoidance and acceptance.” Integrating these definitions, the “body image” was defined in patients who have undergone mastectomy due to breast cancer as *“The image of how one’s physical condition has changed due to treatment, and a judgment based on their own physical perception; through accompanying behaviors, this image can be changed and modified to avoid confusion and promote acceptance, and it further integrates self-concept and QOL.”*

Fieldwork Stage

Next, I evaluated the above definition in three individuals who were living their daily lives from 1.5 to 10 years after surgery. In these cases, we investigated the definition of body

image derived in the theoretical stage. Table 1 shows the demographics of the three cases. The results showed that these individuals’ image and perception of their body were influenced by the conditions of their wound and operations. « The image of the body » is < Something that draws attention > and the client has an < expectation of their body image > . However, they also found that < things do not progress as I imaged/desired > and they had < opinions on reconstruction > to regain their lost breast. « Body perception » evokes the image of the body, describing the primary symptoms of < feeling of twitching in the scar > , < pain > , and < sweating > . Based on this image and their physical perception of the body, participants made a « self-assessment » . This self-assessment comprised categories of < I had no choice > , < I was still lucky to have a breast remaining > , and < I had no choice but to accept it > , which describe their reluctant acceptance of their changed body image. The self-assessment also described negative feelings such as a < loss of femininity > , and < it was shocking > . They also expressed < I dislike myself being negative > , which suggested feelings of self-hate. Overall, patients also evaluated their condition as < it does not really matter > , suggesting that they do not consider it as a significant event. Furthermore, in « actual actions » , which the participants employed following their self-assessment, they mentioned < I do not want to talk about disease/I want to keep the disease secret > . This describes their reluctance to talk about breast cancer to others. Other behaviors were seemingly contradictory: while they admitted that < I want to hide the

Table 1. Demographics of participants

| Case | Age | Postoperative years | Operative procedure |
|------|-----|---------------------|---|
| A | 60s | 1 year | Lumpectomy in right breast |
| C | 50s | 6 years | Mastectomy in left breast |
| I | 60s | 21 years | Lumpectomy in left breast and Lymphadenectomy |

wound/I hide the wound > , they also noted that < I want to show the wound to others/I show the wound to others > . They also appeared to unconsciously isolate their disease and treatment from daily life, reporting < I forget about my treatment in daily life > . Here, they unconsciously forget about their treatment, and suggests that they have become unconcerned about their situation in their daily lives. We interpreted this as occurring once they have fully accepted their difficult experience as a life event, both physically and psychologically (Table 2) . Finally, they sought out ways to live their daily lives positively (< I try to find some benefit > ; Table 2) .

Synthesis of Findings

Analysis Stage

In this stage, the results from the fieldwork stage was compared with my definition of body image derived from the theoretical stage. The factors were focused in particular that influence the transformation of body image identified in literature review, and the integration of body image with self-concept and QOL.

Factors influencing the transformation of body image. My literature review showed that age, marital status, occupation, operational procedures, and emotional states were as factors influencing the transformation of body image. In the fieldwork stage, these factors that empowered were identified and disturbed participants’ positive attitudes towards their bodies. Empowering factors included “reliable relationship with the doctor,” “favorable relationship with partner,” and “peer support.” The “reliable relationship with the doctor” factor comprised outcomes of < The doctor did his/her best > , < I absolutely trust the doctor > , and < The doctor has been my psychological support > . For “favorable relationship with partner” (which is independent of marital status) , a partner’ s positive attitude empowered the

patients, particularly when < They [the partner] do not care [about the operation and disease] > and < They believe that I became better after the treatment > . For “peer support,” empowerment derived from feeling that < it is not only me > and having < Someone whom I can talk about the disease honestly > .

Factors that disturbed patients’ positive attitudes included “Japanese hot spring culture,” “opportunities to see my wound,” and “third-party assessments.” While traveling in Japan, many guesthouses in tourist spots have hot springs, and there are facilities called public baths (onsen) . Since old days, Japanese people have developed their relationships in these highly social places (Eguchi & Sugihara, 1994) . Visits to local hot springs are popular tours for Japanese people. However, these can be opportunities for patients who have undergone mastectomy due to breast cancer to expose their wounds in public. This facet of Japanese culture might have a negative influence on individuals’ self-assessments, such as, < In Japan, I feel miserable taking a private bath by myself when there are public baths > , and < I feel more relaxed during overseas trips because there is no such culture > . In line with this, the NANDA-International nursing diagnosis “disturbed body image” describes a “cultural incongruence” as a related factor of the diagnosis. It is possible that the “hot spring culture” in Japan is equivalent to a “cultural incongruence” in Japan.

Another, related negative factor was “opportunities to see my wound,” which comprised the outcomes of < Hot spring > and < Swimming > . The “third-party assessments” category reflected how patients were sensitive to responses and statements from others, which negatively influenced their positive attitudes, as follows: < It is tough to be told that I am excessively self-conscious by my family > and < I think no one is looking at me, but I hate the reactions from others, like “Oh, she does not

have [breasts]," when they do look at me > (see Table 3) . Age and occupation were identified as related factors in the literature review, but not in the fieldwork stage.

Integration of self-concept and QOL. Herein, results of the literature review and fieldwork were evaluated by using Roy' s adaptation theory, which proposed the self-concept system. This theory defines the self-concept as *"the totality of our beliefs and emotions that an individual has at some point, organized by internal perceptions and the reactions of others."* The self-concept system of Roy' s theory comprises the following components: "self-development," "self-perception," and "self-focus." Self-development refers to the "stage in which a person considers the reactions of others based on physical, cognitive, and moral developments." Self-perception refers to "how the person perceives what is happening in the environment and interprets it through perception to determine its nature." Finally, self-focus is the ability for an individual to effectively exhibit his/her performance by setting goals and planning, and by guiding one' s behavior and evaluating one' s progress. Applying these components to my findings, it can be concluded that the body image can be dynamically transformed in conjunction with the individual' s own growth, as part of self-development. Self-perception can in turn be considered the assessment process described in the categories of "image of body" and "self-assessment" identified in the fieldwork. "Self-focus" can be considered the step in which the patient' s shocked self-concept is reconstructed. All of these processes are illustrated in the following passages.

Ms. C: Well, when people are together, we are not afraid of anything. My opinion is that I don' t have to do that much just to go to the hot spring.

Ms. C: I was more of a coward in the beginning. Now, I try not to think about [the operation] at the office at all. Or rather than not at all, I just don' t make any comments about it spontaneously. Well, I might be conscious of it. First of all, I do not want to be hurt, and do not want someone to be prepared and ask if I am okay because I have already returned to society as a normal person. I feel conscious about my disease when I am not seen as normal.

Ms. C: Well, I had breast cancer, but I obtained more things when I look back.

More specifically, Ms. C' s detailed strategies included: she does not mind not going to hot springs, but she does not wish to talk about her disease spontaneously. Furthermore, she is confident that she is living normally, and believes that she is facing her disease objectively. These can be considered as the stages in which the self-concept is readjusted.

Next, QOL was evaluated. QOL is in general considered "an ambiguous concept that can be defined in different ways, although it is a beautiful concept (Fukuhara, 2001)" ; more specifically, in nursing, it is considered as "quality of daily life" and "quality of vital status" (Sakuda, Miyagoshi, Kataoka, Sakaguchi, & Sato, 2007) . In the following passages, these contexts were focused on in which the transformation of body image merges with the patient' s lifestyle.

Ms. C: Well, I don' t feel any particular inconvenience because I have been able to work. Even for daily life, we must be accustomed, but it may not be important because I have been able to live normally.

Ms. C: Because of breast cancer, there are things that I have lost, and this kind of edema stands out, but it won' t be seen unless I am naked. I can compensate for it with a pad and clothes. So maybe I should not expect too much like that. These passages illustrate how Ms. C. built her

lifestyle through trial and error. Thus, these stages can be considered a readjustment of QOL. In integrating the results of both the theoretical stage and the field work stage, we observed no difference in the structural components of the concept.

Conclusion

The body image of patients who have undergone a mastectomy was found because of breast cancer is an image of the body evoked by one's wound condition (surgical procedures) and physical perceptions, and can be changed through self-assessment and subsequent behaviors. During the changes related to self-assessment, a reliable relationship with one's physician and peer support can help promote a positive attitude. The Japanese hot spring culture and assessment of others were factors that disturbed individuals' adoption of a positive attitude. As the body image changed and improved, there was a gradual readjustment of self-concept and QOL.

This shows that body image is a concept that changes, is refined, and improves, and eventually helps toward readjusting the self-concept and QOL. Furthermore, the NANDA-International nursing diagnosis of “disturbed body image” describes a “cultural incongruence” as a related factor of the diagnosis. It is possible that the “hot spring culture” in Japan is equivalent to this “cultural incongruence.” In this way, when nurses provide support to breast cancer patients by helping them accept their body image, understanding the concept of “body image” is important.

However, there are some limitations in our concept analysis this time. There was little number of sample in the stage of the fieldwork. I think a clearer concept could be found by increasing the number of sample.

Implications for Nursing Knowledge

This study aimed to examine the usefulness of the concept of body image in interventions performed by nurses through a concept analysis of body image among Japanese women who underwent mastectomy. In the past, when Japanese nurses performed body-image interventions, they felt that they lacked confidence and knowledge about changes in the body image, which made it difficult to provide care for the same. However, although mastectomy—a breast-removal treatment—does affect women's self-concept and QOL, we found that, in many cases, their body image changes and readjusts during the post-mastectomy period. Recognizing this will help improve the interventions of Japanese nurses.

Knowledge Translation

Self-assessments and others' evaluations have significant influences on women's body image. Among these, a major factor influencing women's strength to move forward was a relationship of trust with doctors. Nurses involved in these women's care can be another important source of support for the patient. As nurses aim to readjust the patients' self-concept and QOL, it is important for them to explain to patients the diverse opportunities that will be there to be exposed to others' evaluations in daily life. In Japan, in particular, there is a culture of taking onsen (hot spring baths), and it is important for interventions to consider how this will influence patients' readjustment.

Table 2. Outcomes of “Body Image” in Patients after Mastectomy Due to Breast Cancer

| Core category | Category | Outcomes |
|-------------------------------------|---|--|
| <p>The image of the body</p> | <p>◀ Something that draws attention ▶ ◀ Expectation of their body image ▶ ◀ Things do not progress as I imaged/desired ▶ ◀ Opinions about reconstruction ▶</p> | <p>◀ Only I attend to the lost breast ▶ ◀ I dream about behaving more openly without acting as if I had breasts ▶ ◀ I thought I would be able to be a little more beautiful ▶ ◀ I am concerned about asymmetry ▶ ◀ Things do not progress as I desired ▶ ◀ I want to undergo reconstruction, while I cannot decide to do it ▶ ◀ I cannot find a good doctor ▶ ◀ I don’ t know what operational procedure I should choose ▶ ◀ It is expensive ▶ ◀ I would consider if I were a little younger ▶ ◀ I think that it is so late that it only hurts without any benefit ▶ ◀ I have been left with a scar when raising my arm ▶ ◀ I feel pain during any activity ▶ ◀ I experience intense sweating ▶ ◀ I had no choice because I had cancer ▶ ◀ I cannot complain because I have a breast remaining ▶ ◀ I have no choice but to accept it ▶ ◀ I have already accepted it ▶ ◀ I initially felt that I was not a female anymore ▶ ◀ It was shocking ▶ ◀ I dislike myself being so negative ▶ ◀ To be honest, it does not really matter ▶</p> |
| <p>Body perception</p> | <p>◀ Feeling of twitching in the scar ▶ ◀ Pain ▶ ◀ Sweating ▶ ◀ I had no choice ▶ ◀ I was lucky to have a breast remaining ▶ ◀ I have no choice but to accept it ▶ ◀ Loss of femininity ▶ ◀ It was shocking ▶ ◀ I dislike myself ▶ ◀ It does not really matter ▶</p> | <p>◀ I do not want to confide my disease to anyone outside of my family ▶ ◀ I do not go to hot springs anymore ▶ ◀ I tend to sneak around in the dressing room ▶ ◀ I need courage ▶ ◀ I wanted to show the wound since it was well done ▶ ◀ I live normally in daily life, and forget about the disease ▶ ◀ I want others to interact with me normally ▶ ◀ I judge whether I can confirm the measures ▶ ◀ I must check where to stand ▶ ◀ My arrangement of clothes ▶</p> |
| <p>Self-assessment</p> | <p>◀ I do not want to talk about the disease /I want to keep the disease secret ▶ ◀ I want to hide the wound/I hide the wound (I do not go to hot springs) ▶ ◀ I want to show the wound to others /I show the wound to others ▶ ◀ I forget about the disease in daily life ▶ ◀ I try to find some benefit ▶</p> | <p>◀ I do not want to confide my disease to anyone outside of my family ▶ ◀ I do not go to hot springs anymore ▶ ◀ I tend to sneak around in the dressing room ▶ ◀ I need courage ▶ ◀ I wanted to show the wound since it was well done ▶ ◀ I live normally in daily life, and forget about the disease ▶ ◀ I want others to interact with me normally ▶ ◀ I judge whether I can confirm the measures ▶ ◀ I must check where to stand ▶ ◀ My arrangement of clothes ▶</p> |
| <p>Actual actions</p> | <p>◀ I do not want to talk about the disease /I want to keep the disease secret ▶ ◀ I want to hide the wound/I hide the wound (I do not go to hot springs) ▶ ◀ I want to show the wound to others /I show the wound to others ▶ ◀ I forget about the disease in daily life ▶ ◀ I try to find some benefit ▶</p> | <p>◀ I do not want to confide my disease to anyone outside of my family ▶ ◀ I do not go to hot springs anymore ▶ ◀ I tend to sneak around in the dressing room ▶ ◀ I need courage ▶ ◀ I wanted to show the wound since it was well done ▶ ◀ I live normally in daily life, and forget about the disease ▶ ◀ I want others to interact with me normally ▶ ◀ I judge whether I can confirm the measures ▶ ◀ I must check where to stand ▶ ◀ My arrangement of clothes ▶</p> |

Table 3. Factors Related to Transformation of body image

| Core category | Category | Outcomes |
|----------------------------|--|---|
| Empower positive attitudes | <ul style="list-style-type: none"> ◀◀ Reliable relationship with the doctor ▶▶ ◀◀ Peer support ▶▶ | <ul style="list-style-type: none"> ◀ The doctor did his/her best ▶◀ I respect the doctor ▶ ◀ I absolutely trust the doctor ▶◀ I am grateful to the doctor ▶ ◀ The doctor consults gently ▶◀ The doctor has been my psychological support ▶ ◀ It makes a big difference to know that it is not only myself ▶ ◀ If I have mutual support, I might be able to overcome [my poor] body image ▶ ◀ I was supported by my peers ▶ ◀ No one behaved as if they were intruding in my mind ▶ ◀ I can talk about disease honestly ▶ ◀ I can learn what to do from their experiences, such as information about daily life and disease ▶ ◀ I am encouraged when I listen to real stories about life ▶ ◀ It is very important to have peers ▶ ◀ I was able to accept it because of many people who had similar experiences ▶ ◀ The fact that I have peers has been a part of my motivation for being positive ▶ ◀ Having a network of purely consisting of people with experience of the disease, regardless of marital status or the presence of child, is attractive ▶ ◀ I feel relaxed when I get information from friends who have the same disease ▶ ◀ My husband accepted that he does not care ▶ ◀ They believe that I became better after the treatment ▶ |
| | <ul style="list-style-type: none"> ◀◀ Japanese hot spring culture ▶▶ ◀◀ Opportunities to see my wound ▶▶ ◀◀ Third-party assessment ▶▶ | <ul style="list-style-type: none"> ◀ After all, it is a public bath in Japan ▶ ◀ I feel more relaxed during overseas trips because there is no such culture ▶ ◀ In Japan, I feel miserable taking a private bath by myself when there are public baths ▶ ◀ Hot spring ▶◀ Bath ▶◀ Swimming ▶ ◀ It is tough to be told that I am excessively self-conscious by my family ▶ ◀ I think no one is looking at me, but I hate the reactions from others, like “Oh, she does not have [breasts],” when they do look at me ▶ |
| Disturb positive attitudes | | |

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和文要旨

【目的】日本人の乳がんによる乳房切除を受けた患者のボディイメージの概念分析を行う。

【方法】Hybrid Modelの手法にしたがって、理論的段階（文献検討）とフィールドワークの段階から概念を生成した。分析的段階により抽出された概念を統合して洗練化を図った。

【結果】理論的段階より、乳がんによる乳房切除術を受けた患者のボディイメージは、年齢、婚姻状況、職業、感情状態が影響を与えているが、ボディイメージ変容過程の結果、自らの力で混乱状態を回避できることも可能であり、自己概念やQOLの統合へと向かうものであった。またフィールドワークの段階では、4つのコアカテゴリー【身体に対するイメージ】【身体感覚】【自ら下す判断】【実際の行動】が抽出された。分析的段階において、ボディイメージの変容過程に影響する因子や自己概念やQOLへ統合されていく様相について検討した結果、導かれた概念間に大きな差異はなかった。

【結論】乳がんによる乳房切除術を受けた患者のボディイメージは「治療によって変わってしまった身体に対するイメージと、身体感覚によって、自分が下す評価であり、それに伴う行動の中で、変化・修正されていき混乱を回避しながら受容へ向かい、如いては自己概念やQOLの統合へと帰結する」概念であるといえた。