

# Identity Experiences of Young Adult Women Diagnosed with and Undergoing Treatment for Cancer: A Phenomenological Study

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## ABSTRACT

**Objective:** This study examined the aspects of identity affected by the diagnosis and treatment of cancer among young adult women.

**Methods:** The participants were nine women diagnosed with and undergoing treatment for cancer aged 18–25 years. Data were collected through detailed individual interviews, which were transcribed verbatim and analyzed using Colaizzi's phenomenological method.

**Results:** Four categories of aspects of identity were extracted: being burdened with the threat of death from cancer, feeling shaken by the loss of femininity, feeling unsettled in relationships with others, and maturing while undergoing changes. Two factors helped the participants reconstruct their identities: strength provided by support from their family and friends and efforts to stabilize themselves.

**Discussion:** The participants reported experiencing identity breakdowns owing to the threat of death from cancer, loss of femininity, and disruption of relationships. However, with the support of family and friends as well as personal efforts, they were able to repair their shattered identities, leading to the formation of a mature self.

## INTRODUCTION

Approximately 120,000 adolescents and young adults (AYA) worldwide are diagnosed with cancer each year [1]. Their five-year survival rates range from 83 to 89 % across all cancer types [2], indicating an anticipated increase in long-term survivors among AYA cancer patients. In Japan, approximately 20,000 AYA are newly diagnosed with cancer annually, with a five-year survival rate of approximately 75 % [3], surpassing 90 % for certain cancer types [3].

Establishing their identity in the psychological and social domains is challenging for AYA [4], and this period represents a transition to becoming socially independent

>adults. Approximately 80 % of AYA patients with cancer are women [3], who face significant life events, such as employment, marriage, pregnancy, and childbirth [5]. When diagnosed with cancer and undergoing treatment during this critical phase, AYA may experience an impact on their identity owing to changes in appearance and loss of physical function [6]. Moreover, they often encounter confusion in all aspects of life [7, 8], and the identity established in their developmental stage may become unsettled [1]. For AYA patients, the diagnosis of cancer is often unexpected; compared to adult patients with cancer, AYA patients tend to experience higher levels of fear, worry, and sadness [9]. In addition, many AYA patients grapple with anxiety

about cancer recurrence and concerns about their future [10]. Furthermore, AYA patients with cancer exhibit a high prevalence of contemplating death [11]. Therefore, undergoing intensive treatments for cancer during a period when identity is not fully established, as is often the case for AYA, may lead to experiencing fluctuations in identity and inability to lead a life true to oneself. Furthermore, AYA cancer survivors may find it challenging to reintegrate into society after experiencing cancer during a crucial period of social development [12]. Young cancer survivors exhibit lower psychosocial adaptation compared to older cancer survivors [13]. Consequently, providing psychosocial support for AYA patients diagnosed with and undergoing treatment for cancer is important.

AYA patients with cancer are reported to have psychological and social needs related to identity, interpersonal relationships, mental health, autonomy, and occupation, and these needs vary between individuals [14]. Therefore, to provide appropriate assistance to individuals in their teens, twenties, and thirties who are exploring the direction of their lives, age-specific research is required, rather than grouping ages 15–39 years together. Existing studies have examined the experiences of AYA patients with cancer [15], renegotiation of identity in young adult patients with cancer [16], and disease identity of pediatric and adolescent patients with cancer [17]. Although these studies indicate a growing interest in the identity of AYA patients with cancer, empirical studies examining the aspects of the identities among young adult women who have experienced cancer and undergone treatment are lacking. In many developed countries, demographic changes in recent decades have delayed the timing of marriage, childbearing, and employment. Consequently, individuals aged 18–25 years are considered to be in the interregnum between adolescence and young adulthood [18]. Therefore, exploring how the diagnosis and treatment of cancer during the young adult stage (approximately 18–25 years of age) [19, 20] shape individuals' identities from their perspective can provide valuable insights for enhancing nursing practices for AYA patients with cancer.

Thus, this study aimed to elucidate the aspects of identity shaped by the diagnosis and treatment of cancer among young adult women in Japan from their perspective.

## METHODS

### *Study design*

This study aimed to examine the aspects of identity among young adult women diagnosed with and undergoing treatment for cancer, emphasizing the importance of understanding their authentic experiences. To comprehend how the identity of such individuals is shaped by the diagnosis and treatment of cancer through a detailed exploration of their experiences, we used Colaizzi's phenomenological

research method. Colaizzi advocates the meaningful exploration of psychological phenomena [21], making his phenomenological approach well-suited for this study's goal of unveiling aspects of participants' identities.

### *Participants and setting*

The participants were nine young adult women diagnosed with breast or gynecologic cancer who were visiting hospitals or clinics in Japan or were members of cancer patient associations. The inclusion criteria were being an unmarried woman aged 18–25 years at the time of cancer diagnosis, having undergone cancer treatment for at least one year, and being capable of verbal communication. The exclusion criteria were having a history of mental illness and experiencing advanced or recurrent cancer. Approval was obtained from the heads or responsible individuals of hospitals, clinics, or patient associations where young adult women with cancer were receiving treatment. Subsequently, participants who met the inclusion criteria were introduced by these institutions.

### *Data collection*

We conducted interviews to elucidate aspects of participants' identities. Careful consideration was given to the timing and location of the interviews to minimize participant burden. Considering the impact of the COVID-19 pandemic, interviews were conducted either face-to-face or online, with designated private spaces for face-to-face interviews to ensure participants' comfort. Interviews were voice-recorded with participants' consent. To allow participants to freely discuss their experiences, unstructured interviews were conducted. Participants provided personal background information, including current age, type of cancer, treatment information, timing of cancer diagnosis, time elapsed since diagnosis, presence of a partner at the time of diagnosis, family structure (cohabitation status), support situation, and employment status. Interview topics covered a) participants' experiences with their cancer diagnosis, b) changes in their lives or bodies before and after the cancer diagnosis, and c) their perception of themselves since the cancer diagnosis. Each participant underwent one to two interview sessions. In the second interview, a review of the content from the first interview was conducted. The duration of the interviews ranged from 44 to 139 minutes. Following the interviews, participants' narratives were transcribed verbatim.

### *Data analysis*

We adopted Colaizzi's seven-step phenomenological method to identify essential themes [21]. We carefully read the interview transcripts and extracted descriptions of experiences that revealed aspects of participants' identities. Fundamental themes capturing participants' experiences were derived. Three qualitative and phenomenological

researchers examined whether the data and themes aligned. Based on the similarity of themes, we identified theme clusters. Finally, we categorized them based on the commonality of each theme cluster. The lead author conducted the initial data analysis, and all researchers collectively reviewed, refined, and summarized the data through multiple meetings, ultimately presenting the final analysis results.

### **Definition of terms**

Identity, or self-identity, is a temporally and spatially consistent sense of self that is recognized by others and the community [22]. According to Erikson's theory of ego development, the formation of identity in adolescence is the resolution of the conflict between "the establishment and diffusion of identity (ego-identity)"; in other words, it is the re-examination of the view of the self-created in the process of growth from childhood and formation of a new view of the self-considering the future [23]. Identity develops throughout one's life [24].

A previous study identified four illness identity dimensions among AYA with type 1 diabetes: engulfment, rejection, acceptance, and enrichment [25]. The present study adopted these disease identities to explore experiences of the fluctuation and disintegration of established identities, losing oneself during cancer diagnosis and treatment, questioning one's identity as a person with cancer, and forming a new identity.

### **Stringency**

We ensured the stringency of the research based on the criteria of truth value, applicability, consistency, and neutrality [26]. First, to ensure truth value, we encouraged participants to freely narrate their experiences. We conducted repeated interviews, when possible, to ensure the accuracy of the recorded interviews. Second, to maintain applicability, we presented participants' background information. Third, for consistency, we followed Colaizzi's seven-step procedure [21]. By frequently reviewing descriptions of the narrated experiences, we critically verified them throughout the process. Finally, to ensure neutrality, we made efforts to eliminate the researchers' biases and preconceptions when interpreting the data. In addition, we maintained a neutral attitude to ensure that the researchers' reactions did not influence the interviews or analyses. To strengthen the reliability of the analysis, the descriptions of patient experiences were verified by three researchers in the field of nursing.

### **Ethical considerations**

This study was approved by the Research Ethics Committee of Osaka Medical and Pharmaceutical University (approval number: 2021-049), as well as the research ethics committees of the implementing facilities and person(s) representing the patient associations. The researchers provided both written and verbal explanations to participants regard-

ing the voluntary nature of participation, freedom to withdraw consent, privacy protection, and potential benefits and risks associated with participation. Written informed consent was obtained from all participants. Participants' mental and physical well-being were monitored during the interviews.

## **RESULTS**

The mean age of participants at the time of diagnosis was 24.2 years (range: 18–27 years old), and the mean age at the time of the interviews was 28.7 years (range: 23–33 years old). Four of the participants had breast cancer and five had gynecologic cancer (**Table 1**).

The phenomenological analysis identified four categories and 17 theme clusters of the aspects of participants' identities (**Table 2**). In addition, two categories and 13 theme clusters emerged as elements contributing to the formation of participants' mature selves.

### ***Burdened with the threat of death from cancer***

All participants reported being profoundly shocked by the sudden diagnosis of cancer, perceiving it as a threat of death. Initially, they found themselves in a state of panic and felt as if their thoughts were being dominated, and the reality of being diagnosed with cancer took time to sink in. Each time participants went for a routine examination, the fear of recurrence or metastasis lingered, leading them to acknowledge the enduring burden of their cancer diagnosis.

### ***Being overwhelmed by the threat of cancer***

Approximately half of the participants experienced an overwhelming threat of cancer, living in a constant "state of panic." The sudden intrusion of cancer into their previously healthy lives led to profound anxiety and fear, as indicated by the statement that the "disease was becoming the theme of life." Participants found themselves living day by day, constantly thinking about their cancer diagnosis.

*C: When I came to the hospital for the first time, I was quite panicky about the seriousness of the situation, as well as when the subject of surgery came up at the first consultation. ... I was in a big panic that I wanted to get treated quickly, and ... I was suddenly terrified, or I was in a big panic thinking, is it alright that it (surgery) is so far away in the future? (C-I-26p2)*

### ***Struggling with the anxiety of death***

Participants were overwhelmed by emotions such as anxiety, fear, and depression. They were grappling with a constant fear of death, thinking that they might be in "a state closely associated with death."

*F: After sending my samples to pathology and while waiting for the results, I felt for the first time that I might be standing next to death, and at that time I was really anxious*

**Table 1** Participants' characteristics

Time of Diagnosis						During Interview		
ID	Age (years)	Diagnosis	Cancer stage	Details of treatment	Academic and employment status	Age (years)	Time since diagnosis (years)	Marital status
A	27	cervical cancer	I	surgely chemotherapy	employment	33	7	single
B	25	breast cancer	I	surgely radiotherapy hormone therapy	part time employment	31	6	married
C	26	uterine cancer	I	surgely	employment	28	2	single
D	23	cervical cancer	II	chemoradiotherapy	part time employment	28	5	single
E	24	vaginal cancer	I	surgely	employment	28	4	single
F	25	breast cancer	I	surgely chemotherapy	employment	33	8	single
G	18	ovarian cancer	I	surgely chemotherapy	student	23	5	single
H	26	breast cancer	I	surgely hormone therapy	student	27	1	single
I	24	breast cancer	II	surgely chemotherapy hormone therapy	part time employment	27	3	single

**Table 2** Aspects of identity in young adult women diagnosed with and undergoing treatment for cancer

category	theme cluster	Period from diagnosis to start of treatment	Period of initial treatment	Follow-up period
burdened with the threat of death from cancer	being overwhelmed by the threat of cancer	→		
	struggling with the anxiety of death	→		
	perceiving cancer as something that happens to someone else	→		
	Gradual acceptance	→		
	feeling sorry for themselves and becoming a victims	→		
shaken by the loss of femininity	feeling trapped by cancer during routine check-ups and reappearance of symptoms			→
	having a body lacking in femininity	→		
	being deprived of the chance to give birth to children	→		
	inability to accept being a woman who is missing one breast	→		
	breakdown of femininity owing to changes in appearance		→	
feeling unsettled in relationships with others	being discouraged by others and society's lack of understanding of cancer	→		
	loneliness of being left behind academically and socially	→		
	envying women of the same age	→		
maturing while undergoing changes over time	sense of regaining balance and reclaiming a normal life			→
	cancer as a part of oneself			→
	living today, without losing to cancer			→
	growing beyond their pre-illness selves			→

and worried. At that time, I thought, "Oh, I might be in a situation where I might actually die." (F-1-135p7)

*Perceiving cancer as something that happens to someone else*

Participants found it difficult to perceive themselves as a person with cancer and instead regarded it as if it were happening to someone else. They were struggling to grasp the reality of the situation.

*F: At that time, I really did not have any fear of cancer. Although I did not regard it as someone else's busi-*

*ness, I did not think it was something that was happening to me, and I had no idea what was going to happen to me. (F-1-91p5)*

*Gradual acceptance*

Participants gradually began to recognize that they had cancer as treatment progressed. The acceptance of the diagnosis came with a sense of "inevitability."

*I: Gradually, I started to remember that "I am a sick person," that "I am ill," and ... at first, it felt like someone else's problem, but gradually it was like, "I have to have an*

operation.” And then, when the first operation was over, the investigations showed that something was a bit wrong; at that point, the stage went up by about one, and then I had to have anti-cancer drugs and so on. That is when I really began to feel it. (I-1-39p2)

#### *Feeling sorry for themselves and becoming victims*

Some participants labeled themselves as “victims” or “women at risk” owing to their cancer diagnosis, expressing pity and sympathy toward themselves. They revealed their diagnosed selves to others as pitiable entities.

*C: When I talk about my own experiences, I feel like I've been victimized. I don't know how to say it, but I feel like I've been victimized, like, I've been through this, you know; you must feel sorry for me, right? (C-1-270p14)*

#### *Feeling trapped by cancer during routine check-ups and appearance of symptoms*

Participants perceived regular check-ups for recurrence and metastases as “hurdles” or “barriers.” They viewed these check-ups as “pass or fail,” “seeking approval from external sources,” and “having their life controlled from the outside.” In addition, they associated bodily changes with signs of recurrence or metastasis, leading to anxiety about the uncertainty of their condition.

*B: Hmm, well, I'm most afraid of recurrence, so the CT scans that take place once per year... feels like I am being told whether I passed or failed, and I'm really afraid and anxious about that ... I feel like how I am is being evaluated externally rather than me evaluating myself, as if whether or not I live is being controlled externally. I guess I have such feelings. (B-1-318p16)*

#### *Shaken by the loss of femininity*

Participants who underwent surgical, chemo, and radiation therapies for breast or gynecologic cancer reported experiencing changes in their appearance, as well as the impact on fertility, loss of fertility, and loss of body hair owing to chemotherapy. This was a profound and shocking experience that greatly shook their self-perception as women. They felt as if losing feminine aspects had stripped them of their human worth.

#### *Having a body lacking in femininity*

Participants who underwent surgical or drug therapies harbored a fear of losing their fertility after being diagnosed with cancer. This fear stemmed from the uncertainty of potentially no longer being able to bear children, leading to a sense of crisis that they might lose their femininity.

*I: Well, I didn't want to do anti-cancer drugs. (Researcher: Why is that?) It was suggested to me that menstruation might not return. I had always loved children so much and wanted to have children. But I was like, “What? I thought that if menstruation didn't return, I wouldn't be able*

*to have children,” and I wondered what the point of taking these anti-cancer drugs was. (I-1-423p22)*

*C: I felt like, in a way, that after the discovery of this disease and having undergone surgery, I am different from the women around me. I wasn't trying to discriminate myself from them, but I became sort of pessimistic, thinking, “I've become a woman with risk.” (C-1-147p8)*

#### *Being deprived of the chance to give birth to children*

Participants who lost their fertility owing to the removal of the uterus or ovaries or the adverse effects of radiation therapy during cancer treatment experienced the feeling of “resigning oneself to a lifetime without children” and the sense that they had lost “the right to decide whether to have children.” In navigating life as women, they experienced disappointment and resentment as they were unable to bear children, recognizing themselves as individuals who were not even allowed the possibility of having children.

*A: When I saw mothers with their children, women carrying their babies or pushing strollers, I almost cried, thinking, “Oh, I'll never be able to do that.” On days like that, seeing the faces of such happy mothers, I felt I had to resign to not being able to ever have that. (A-1-120p6)*

#### *Inability to accept being a woman who is missing one breast*

For participants with breast cancer, the prospect of having only one breast owing to a mastectomy was difficult to accept. Some participants prioritized breast reconstruction to achieve a similar appearance to their pre-surgery bodies and expressed a preference against a total mastectomy.

*I: The doctor was pressing for a total removal, and I did not want to do it. However, my mother and the doctor preferred that I do it. This troubled me so much. At that time, it (breast reconstruction) became covered by insurance, and in my case, it would be covered by insurance, so I thought I would have to have [my breast] replaced. Then, I decided to go with the total removal. (I-1-61p4)*

#### *Breakdown of femininity owing to changes in appearance*

Participants undergoing chemotherapy experienced changes in their appearance owing to hair loss, extending beyond the loss of scalp hair to include body hair. For them, this significant alteration in their appearance led to the loss not only of “confidence” and “self-expression as a woman” but also the destruction of their self-image as women. Hair loss was perceived as a profoundly impactful event that threatened their sense of self, as, for them, hair held more importance than life itself.

*F: It was just about the way I looked, and I didn't want my hair to fall out. That was the biggest thing, and I absolutely hated it. It sounds a bit strange, but I really hate the change in my appearance, like the loss of hair, even more than the possibility of dying. (F-1-292p15)*



***Feeling unsettled in relationships with others***

Before their illness, participants were engaged in various aspects of social life, such as academics, employment, and romantic relationships. However, after diagnosis, participants experienced the fear of potentially losing their fertility owing to treatment, disappointment, and reluctance to be seen by others in their altered appearance resulting from chemotherapy-induced hair loss. They harbored negative emotions driven by others' reactions and comparisons in interactions with peers of the same age and in relationships in school or work settings, leading to unstable self-esteem.

***Being discouraged by others and society's lack of understanding of cancer***

Some participants experienced shock as their lack of physical stamina was not understood by people at their part-time jobs, or they were unable to secure employment owing to their cancer diagnosis. In addition, they felt depressed and distressed by the difficulty of having others comprehend the challenges they faced with cancer.

*I: (At a job interview) I told them that I was taking this medicine and how often I took it, and they dropped me from the candidacy after that. I felt shocked, thinking, "Oh, I didn't know I could be rejected for that." (I-1-585p30)*

***Loneliness of being left behind academically and socially***

Participants who had to take a leave of absence from school or work experienced a sense of loss regarding their academic progress, the chance to graduate with friends, and job opportunities, leaving them with a feeling of being left behind. They expressed a sense of isolation from society and loneliness owing to their cancer diagnosis and treatment.

*A: To be honest, my main motivation for leaving the hospital and completing the six-course program was that I wanted to go out into the world. After being in the hospital for almost eight months, I felt like I was left very far behind. (A-1-499p25)*

***Envy women of the same age***

Before their diagnosis, participants dreamt of love, marriage, pregnancy, and childbirth, leading vibrant and fulfilling social lives. However, their lives took a sudden turn after being diagnosed with and undergoing treatment for breast or gynecologic cancer. They compared themselves to healthy women of their age and harbored a sense of loss and negative emotions such as "envy," "anger," and "sadness."

*F: The biggest thing I thought was, "Why me?" And then, gradually, I felt—and I know this is a terrible thing to say, but—why not that girl? And an evil and dark part of me came out. I begrudged seeing my friends having fun and looking pretty. Maybe it's more blaming them than begrudging them; I don't know how I can explain it. It was a time when I asked why it was me who had to face this illness*

*rather than the others. (F-1-183p10)*

***Maturing while undergoing changes over time***

Participants felt their self-esteem being shaken by the diagnosis and treatment of cancer, facing the threat of death, losing their femininity, and experiencing changes in relationships with others. However, they continued to believe that support from their friends and family provides strength and made efforts to stabilize themselves. Gradually, while reconciling with the emotions and unexpected changes in their bodies owing to cancer and the associated treatment, participants approached "almost returning to normal (pre-illness) lives" in the present and future. They decided to "embrace cancer as a part of [themselves]," resolved to live with it, and started feeling a sense of living toward the future. One participant stated that she "can find dreams for the future." Moreover, participants recognized themselves as women who had grown beyond their pre-illness selves and developed a new sense of values, understanding that "femininity emanates from within."

***Sense of regaining balance and reclaiming a normal life***

Participants who experienced sequelae from cancer treatment experienced a decrease in concentration and physical strength, found it difficult to control their lives, and experienced feelings of "difficulty," "emptiness," and "irritation" owing to no longer having a healthy body. However, after gradually facing the changes in themselves caused by cancer, receiving the support of family and friends, and gaining the ability to return to work, they began to feel that they could finally lead a "normal life."

*A: But I think that in many ways, I have come to have a better balance. In many ways, when five years have passed since my surgery, I have experienced many things in those five years. Finally, in the fifth year or so, I have come to really understand how I should live my life in this way, in this balance. (A-1-1469p74)*

***Cancer as a part of oneself***

After accepting that they had cancer, participants began to embrace the illness not as a foreign entity but as a part of themselves. Subsequently, they gained the ability to control the emotions stirred by cancer and gradually accepted and coexisted with it.

*A: I do not have the idea of fighting against and avoiding the fact that I have cancer. I have the image that it is coexisting in my body, and although it is in my body, right now, I just want it to sleep with a blanket over its head or take it easy, like taking a rest with a blanket over its head. (A-1-1385p70)*

*B: I guess, in the end, because the cancer developed from a part of me, I guess I have to live with it, even though it is a part of me and a bad thing. I am just hoping it will not do me too much harm. (B-1-862p44)*

**Table 3** Elements that lead to a mature self in young adult women with cancer

category	theme cluster
strength provided by support from their surround	supported by the presence of cancer survivors aided by the presence of friends and family finding assurance and confidence from others rescued by the response of healthcare professionals
efforts to stabilize themselves	avoiding thinking about cancer encouraging oneself by comparing with other patients presenting an image that dispels the perception of illness deciding whether or not to disclose their cancer diagnosis to others building relationships with those who understand them not making parents feel burdened making efforts to enhance appearance giving meaning to the inability to have children taking actions to be helpful to fellow patients

*Living today, without losing to cancer*

Participants reported cherishing the “present moment,” where they could be active and healthy, expressing gratitude for being alive. They adopted a positive outlook toward the future, inspiring themselves to face the uncertainties by living with the determination “to not be defeated by cancer,” consciously embracing each day, and focusing on doing “what they could only do at that moment.”

*F: I feel like I'm losing myself. Not that I am defeated by something I don't want, but I don't want to be sick either, and I hate feeling like I'm being crushed by it. I want to get my life back to normal as soon as possible, and in fact, it makes me want to have various experiences in life even more. So, this (cancer) that I have now is a huge obstacle; if it crushes me, it will crush me more and more, and I will not be able to do the things I want to do. So, I want to absolutely win, at least in my mind. (F-2-105p6)*

*Growing beyond their pre-illness selves*

Participants were emotionally shaken by the loss of sexual and reproductive functions and changes in appearance owing to cancer diagnosis and treatment. They carried the burden of cancer, felt threatened by the loss of femininity, and struggled to reconcile with their past way of life and lifestyle. However, they were aware that “living as they did before was a waste” and expressed “confidence in living as the person who overcame the challenging experiences of treatment.” They recognized positive transformations in themselves beyond their pre-illness identity, becoming stronger as individuals and enriching their humanity.

*A: I feel more uncomfortable now than I did before I got sick. When I think about it, my body was as light as the sky before I got sick. I feel like I was able to do anything,*

*like there was nothing in life to fear. Even though there have been difficulties, I feel like it has been an opportunity to learn about many things, and having such opportunities has been a positive thing for myself. I think it's been very good that I've been able to go through my life while being able to think that the experience of having cancer has been a good thing for me. (A-1-1299p65)*

*I feel that I have changed so much that I feel like I am a different person in a way, because I have this image of myself before the surgery, and now I am really, totally different. (A-1-1321p67)*

This study identified two primary aspects that led to the formation of a mature self among the participants (**Table 3**). The experience of cancer diagnosis, treatment-related changes in appearance, and a decrease in fertility were experiences that entangled participants in negative thoughts and emotions, causing a transformation in their identities. The interviews revealed “support from the surroundings” and “making efforts to stabilize oneself” as factors leading to a mature self. These factors were continuously monitored from the time of cancer diagnosis through follow-up period. Through these elements, participants were able to regain lost confidence and enhance diminished self-esteem.

***Strength provided by support from their surround***

Participants, in their journey from an unsettled self-caused by the diagnosis and treatment of cancer to a mature self, found support from others, gained confidence, and received help from healthcare professionals.

Participants gained an understanding of the lives of specific cancer patients by learning about the experiences of fellow patients and family members diagnosed with the same type of cancer. This exposure to real-life experiences

allowed them to comprehend the daily life of people with cancer and find encouragement from those who shared the same diagnosis. Some participants mentioned, “I would look at the SNS pages of people who are fighting against the illness with all their might and feel energized by them” and “I felt supported by the presence of cancer survivors,” expressing how they were encouraged by those with the same illness as them. Moreover, participants found solace in the presence of close and understanding family and friends who supported them emotionally. Furthermore, the change in appearance owing to cancer treatment was difficult for participants to accept. However, they gained confidence from “the feeling of being lifted by others who encouraged [them]” and “felt assured by others.” Participants facing the fear of cancer diagnosis or recurrence felt a sense of relief and comfort owing to the response of healthcare professionals.

#### *Efforts to stabilize themselves*

Participants made efforts to stabilize themselves amidst the shock of receiving a cancer diagnosis, loss of sexual and reproductive functions, and changes in appearance associated with treatment by making adjustments in their relationships with others, controlling emotions, and grooming their appearance.

Some participants made efforts to avoid being consumed by negative thoughts and emotions. They distracted themselves from thinking about cancer by encouraging themselves by comparing their situation to that of others and convincing themselves that “they were better off.” In addition, participants worked to “present an image that dispels the perception of illness,” aiming not to elicit sympathy from people around them owing to the negative perceptions about cancer. They made conscious decisions about whether to disclose their cancer diagnosis to others and sought relationships with people who understood and supported them in their social lives. This involved participants carefully managing their relationships with others and ensuring that they did not inconvenience others or hurt themselves emotionally. In their social interactions, participants chose to connect primarily with individuals who understood and accepted them as individuals with cancer. Considering the relatively close relationships with parents that are common among this age group, participants made a conscious effort to avoid making their parents feel burdened or guilty about their cancer diagnosis. Furthermore, participants were able to perceive their womanhood in a new light, such as “giving meaning to the inability to have children” and doing childcare work despite the inability to have children. Participants felt their self-esteem was enhanced by “taking actions to help others with the same illness,” such as by talking about their cancer experiences with others who had also been diagnosed with cancer.

## DISCUSSION

### *Breakdown of identity in young adult women*

Previous studies have found that AYA patients with cancer undergo a breakdown of psychological, social, sexual, and physical identities [17]. In this study, participants perceived themselves as individuals “burdened with the threat of death from cancer.” Participants’ identities, which had been constructed throughout their lives, broke down owing to the diagnosis and treatment of cancer. As noted above, identity is considered to be a temporally and spatially consistent sense of oneself [22]; however, participants believed that their consistent sense of who they were was shattered by cancer. They were overwhelmed by the fear of death to the extent that their thoughts seemed to be overtaken by this threat. Furthermore, they could not accept their diagnosis and perceived it as happening to someone else, which could appear as being in denial. Participants could not face what happened to them until they experienced the actual surgical removal of their breasts or changes in their appearance, such as hair loss caused by chemotherapy. People in this age group are generally inexperienced; therefore, despite hearing the diagnosis, they may not be able to accept it until they experience painful treatments.

Participants gradually accepted their cancer diagnoses. Some participants labeled themselves as victims and experienced self-pity, going through life with the burden of cancer.

Moreover, participants were shaken by the loss of femininity and its potential effect on life events such as marriage, pregnancy, and childbirth. Previous studies have reported that patients with breast cancer experience a loss of identity when undergoing chemotherapy [27] and that they must reconstruct their female identity to cope with changes in body image [28]. Similarly, in this study, participants felt as if their previously complete feminine bodies had become incomplete owing to surgical procedures or chemotherapy. In addition, participants who lost reproductive function owing to cancer treatment felt that they “lost the right to have children” or were deprived of the privilege of pregnancy and childbirth, which they considered to be the gender role of women. Conversely, participants with breast cancer exhibited the inability to accept having one breast, particularly struggling with the loss of a symbol of femininity and sought breast reconstruction. They experienced the loss of femininity owing to changes in appearance. Similarly, previous studies have reported that young patients with breast cancer comment on having disfigured bodies that have lost their femininity owing to hair loss during treatment [29] and being uncomfortable in their bodies [30]. Participants in this study experienced a strong sense of conflict, feeling as if they had lost themselves owing to the transformation in their body image. Patients diagnosed with cancer have been reported to prioritize the desire to live [31]; however, some participants expressed that the loss



of a breast or hair owing to cancer was more challenging than the potential loss of life. Anxiety about the inability to have children and resistance to appearance transformations caused treatment delays. Being diagnosed with and treated for cancer at an age when femininity plays a central role in a woman's identity shook the foundations of participants' identities as women, threatening the core of their selves and leading to the breakdown of their identities.

Identity in adolescence has individual and relational aspects; the latter is characterized by the ability to build relationships with others based on a sense of trust in the world and establishing mutual relationships with others [32]. In addition, the identities of individuals with cancer are often co-constructed through negotiation with surrounding people, places, and situations, according to a relational perspective [33]. Therefore, for young adults, the relationship with and influence of their surroundings can be considered the foundation of their identity. Cancer and treatment may change this relationship, resulting in an experience that shatters identities. As revealed in the theme of "feeling unsettled in relationships with others," participants experienced a significant struggle regarding the loss of femininity in their appearance perceived by others. A study reported that patients' body image experiences change over time and are significantly influenced by concerns about how others perceive them [6], which was echoed by participants in the present study. Therefore, the reactions of people around young adult women with cancer are crucial. In their interactions with others, participants harbored negative emotions that they had not considered when they were healthy. Friendships in adolescence exhibit many objective similarities in terms of situation, position, and group membership, which is particularly important [34]. Thus, participants' envy of other women of their own age may have been caused by a comparison of their bodies, which were transformed by the treatment, with those of healthy women of the same age. In other words, this response may reflect a characteristic of psychological development in adolescents. Furthermore, cancer and the loss of femininity created an invisible gap between participants and society, leading to a disruption in interpersonal relationships. This disruption in their lived experiences within society contributed to the breakdown of their identities.

Thus, this study revealed that participants' identities were affected by the threat of death from cancer. In addition, their gender identities and self-identities were disrupted, leading to the breakdown of their identities. While previous studies have revealed breakdowns of existing identity owing to cancer [17] and identity crises resulting from the loss of fertility [35], the findings of this study provide a novel insight by demonstrating the intricate connection between cancer, loss of femininity, loss of social relationships, and the subsequent breakdown of identity.

### ***Living with a repaired new identity***

Strength provided by support from friends and family and efforts to stabilize themselves helped participants live their lives with new identities as individuals who mature and transform over time. Young adult patients with cancer, who inevitably lose control over their lives, often attempt to return to the familiar lifestyle they consider "normal" [36, 37]. Participants in this study also experienced a "sense of regaining balance and reclaiming a normal life," achieved through the support of reliable family and friends and healthcare professionals. Moreover, efforts to stabilize themselves contributed to their new identities. The psychological and social experiences of AYA patients with cancer are often described as a process of "evolving toward a new life after treatment," in which "maintaining a normal life is essential" [38]. Therefore, "regaining balance and reclaiming a normal life" can be considered a starting point for constructing a new identity, wherein participants become individuals able to live with cancer and cherish the present.

Furthermore, some participants expressed that they had grown beyond their pre-illness selves: "Everything is truly positive for me now ... the current me has changed so much, and in a sense, there's a feeling of being like a different person." These women felt that they could live their lives with a new identity. For participants who had completed their treatment, renegotiating with the post-cancer self-required facing developmental challenges, including the need for a renewed commitment to developmental tasks [16]. They perceived taking on the burden of cancer as a challenge and, despite intense struggles, accepted the life they had after cancer. They endured their journey with cancer, living alongside it, and refused to be defeated by it; thus, they were able to live with a new identity. We believe that acquiring a new self-identity can be achieved five to eight years after diagnosis. Our findings revealed that participants regained their normal life one year after the cancer diagnosis. Therefore, psychological support for patients with cancer in the first year after diagnosis may be important.

### ***Implications for nursing practice***

Participants experienced confusion and panic owing to the threat of cancer. Treatment for breast and gynecologic cancer is likely to cause loss of fertility and changes in appearance, leading to women feeling shaken by the loss of femininity. Thus, comprehensive support for both physical and mental aspects is required for patients with cancer, including decision making regarding treatment options, such as surgery and chemotherapy, as well as breast reconstruction and fertility preservation. Moreover, crisis intervention associated with the cancer diagnosis should be provided.

In addition, participants in this study experienced the breakdown of identity but were able to regain and reconstruct their identities through support from their surround-

ings and self-help efforts. Identity during adolescence has a “relational” aspect that develops through relationships with others [32]. Therefore, family education and peer support could help family members and friends provide support to individuals with cancer.

Patients with gynecologic cancer reported receiving individual and complex support from nurses, including tailored care, accessible care, and dependable expertise. Developing an integrated intervention model that enables support for patients in this period is urgent [39]. Thus, patient care requires individualized, evidence-based interventions that consider patient needs.

### **Limitations and strengths**

This study adopted a phenomenological approach, which provided detailed insights into individual experiences. As such, the results cannot be generalized. Despite this limitation, the results of this study serve to highlight phenomena that cannot be solely interpreted from a medical perspective and contribute to a deeper understanding of the aspects of identity transformation among young adult women diagnosed with cancer and undergoing treatment. This understanding could enhance nurses’ comprehension of the challenges faced by young adult women, who comprise a limited patient population. Furthermore, this understanding could contribute to supporting these women in rebuilding their identities, which are disrupted by cancer diagnosis and treatment, and living with a renewed sense of self.

### **Conclusion**

Young adult women who receive a cancer diagnosis experience a threat to their identities owing to the burden of cancer. Furthermore, their gender, self, and social identities are disrupted, including the loss of femininity and feeling unsettled in relationships with others, ultimately leading to the breakdown of their identities. However, they are able to live their lives as individuals with renewed identities after maturing while undergoing changes with support from friends and family and efforts to stabilize themselves. This insight can assist nurses in understanding various aspects of the identity of young adult women with cancer and the developmental challenges they undergo. It can also contribute to supporting young adult women who have reconstructed their identities and are living with a new sense of self after the disruption caused by cancer diagnosis and treatment.

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### **CREDIT AUTHOR CONTRIBUTIONS**

RH: Conceptualization, methodology, investigation, data processing, analysis, writing (manuscript preparation), writing (reviewing, editing), obtaining funding, project management.

KS: Conceptualization, methodology, data processing, analysis, writing (reviewing, editing).

MK: Analysis, writing (reviewing, editing).

### **DECLARATION OF COMPETING INTERESTS**

The authors declare no conflicts of interest associated with this manuscript.

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### **ETHICS STATEMENT**

This study was approved by the Research Ethics Committee of Osaka Medical and Pharmaceutical University (approval number: 2021-049). Participants were provided with information regarding the research purpose, methods, and the freedom to withdraw consent and were asked to sign an informed consent form before participating in the interviews. The interviews were voice-recorded with participants’ consent. To ensure anonymity, participants’ personal information was coded. Participants received compensation after each interview.

### **DATA AVAILABILITY STATEMENT**

The data that support the findings of this study are available from the corresponding author upon reasonable request.

### **DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS**

No AI tools/services were used in the creation of this work.

### **REFERENCES**

1. World Health Organization, International Agency for

- Research on Cancer. Estimated number of new cases in 2020, worldwide, both sexes, ages 15-39; 2021. <https://gco.iarc.fr/today/explore> Accessed October 25, 2023.
2. Miller KD, Fidler-Benaoudia M, Keegan TH, et al. Cancer statistics for adolescents and young adults. *CA Cancer J Clin* 2020;70(6):443–459.
  3. National Cancer Center Japan, In-hospital Cancer Registry: Pediatric and AYA Generation Cancer Aggregation. Summary of the first data by the Central Agency for Pediatric Cancer. 2016-2017 Pediatric AYA Summary Report of In-Hospital Cancer Registry; 2019. [https://www.ncc.go.jp/jp/information/pr\\_release/2019/1018/index.html](https://www.ncc.go.jp/jp/information/pr_release/2019/1018/index.html) Accessed October 25, 2023.
  4. Newman BM, Newman FR. Lifespan Developmental Psychology (New Edition): Erikson's Life and its Possibilities. Tokyo: Kawashima Shoten; 1988.
  5. Okamoto Y. Development of Identity Lifelong Development. Tokyo: Minerva Shobo; 2007.
  6. Moore JB, Canzona MR, Puccinelli-Ortega N, et al. A qualitative assessment of body image in adolescents and young adults (AYAs) with cancer. *Psychooncology* 2021;30(4):614–622.
  7. Coccia PF, Pappo AS, Beaupin L, et al. Adolescent and young adult oncology, version 2.2018, NCCN Clinical practice guidelines in oncology. *J Natl Compr Cancer Netw* 2018;16:66–97.
  8. Ferrari A, Barr RD. International evolution in AYA oncology: current status and future expectations. *Pediatr Blood Cancer* 2017;64:e26528.
  9. Smrke A, Leung B, Srikanthan A, et al. Distinct features of psychosocial distress of adolescents and young adults with cancer compared to adults at diagnosis: patient-reported domains of concern. *J Adolesc Young Adult Oncol* 2020;9(4):540–545.
  10. Comprehensive Research on Cancer Control for Adolescents and Young Adults (AYA). A project funded by the Ministry of Health, Labour and Welfare (MHLW), 2016-18. Support Guide for Adolescents and Young Adults with Cancer. Tokyo: Kanehara Publishing Co; 2019.
  11. Nilsson S, Hård Af Segerstad Y, Olsson M. Worrying about death: an initial analysis of young adult cancer patients' needs. *J Adolescent Young Adult Oncol* 2020;10(1):105–108.
  12. Zebrack BJ, Oeffinger KC, Hou P, et al. Advocacy skills training for young adult cancer survivors: The Young Adult Survivors Conference at Camp Māk-a-Dream. *Support Care Cancer* 2006;14(7):779–782.
  13. Kim HY, Ko E. Psychosocial adjustment between younger and older breast cancer survivors. *Asian Oncol Nurs* 2012;12(4):280–288.
  14. Neylon K, Condren C, Guerin S, et al. What are the psychosocial needs of adolescents and young adults with cancer? A systematic review of the literature. *J Adolesc Young Adult Oncol* 2023;12(6): 799–820.
  15. Kim B, White K, Patterson P. Understanding the experiences of adolescents and young adults with cancer: a meta-synthesis. *Eur J Oncol Nurs* 2016;24:39–53.
  16. Pearce S, Whelan J, Kelly D, et al. Renegotiation of identity in young adults with cancer: a longitudinal narrative study. *Int J Nurs Stud* 2020;103:465.
  17. Posa S, Moola FJ, McPherson AC, et al. Exploring illness identity among children and youth living with cancer: a narrative review. *Pediatr Blood Cancer* 2021; 68(11):e29251.
  18. Patterson P, McDonald FEJ, Zebrack B, Medlow S. Emerging issues among adolescent and young adult cancer survivors. *Semin Oncol Nurs* 2015;31(1):53–59.
  19. Arnett JJ. Emerging adulthood: a theory of development from the late teens through the twenties. *Am Psychol* 2000;55(5):469–480.
  20. Arnett JJ. Emerging Adulthood: The Winding Road from the Late Teens through the Twenties. 2nd ed. England: Oxford University Press; 2014.
  21. Colaizzi PF. Psychological research as the phenomenologist views it. In: Valle R, King M, eds. *Existential-Phenomenological Alternatives for Psychology*. New York: Oxford University Press; 1978:48–71.
  22. Erikson EH. *Identity and the Life Cycle*. New York: W.W. Norton; 1959.
  23. Newman BM, Newman PR. *Development Through Life*. 13th ed. Boston, MA: Cengage Learning; 2018.
  24. Okamoto Y. *Development of the Theory of Lifelong Identity Development*. Tokyo: Minerva Shobo; 2007.
  25. Oris L, Rassart J, Priken S, et al. Illness identity in adolescents and emerging adults with type 1 diabetes: introducing the illness identity questionnaire. *Diabetes Care* 2016;39(5):757–763.
  26. Guba EG, Lincoln YS. *Effective Evaluation: Improving the Usefulness of Evaluation Results through Responsive and Naturalistic Approaches*. San Francisco: Jossey-Bass; 1981.
  27. Ciria-Suarez L, Jiménez-Fonseca P, Palacín-Lois M, et al. Breast cancer patient experiences through a journey map: a qualitative study. *PLoS One* 2021;16(9):e0257680.
  28. Zeighami Mohammadi S, Mohammad Khan S, Zohreh Vanaki K. Reconstruction of feminine identity: the strategies of women with breast cancer to cope with body image altered. *Int J Womens Health* 2018;10:689–697.
  29. Ahna J, Leeb KE. A hermeneutic phenomenological study on the disease experience among young women with breast cancer. *Asia Pac J Oncol Nurs* 2023;10(10):e100310.
  30. Kocan S, Aktug C, Gursay A. "Who am I?" A qualitative meta-synthesis of chemotherapy-induced alopecia and body image perception in breast cancer patients. *Support Care Cancer* 2023;31(4):237.

31. Chao YH, Wang S-Y. The desire to survive: the adaptation process of adult cancer patients undergoing radiotherapy. *Jpn J Nurs Sci* 2015;12(1):79–86.
32. Yamada M, Okamoto Y. A review and some consideration on researches of identity on adolescence from view points of “individual” and “relatedness”. *Graduate School of Education, Hiroshima University* 2007;56(3):199–206.
33. Hammond C, Teucher U. An abundance of selves: young adults’ narrative identities while living with cancer. *Cancer Nurs* 2017;40(1):58–65.
34. Nakama R. The significance of friendship to self development during adolescence. *Graduate School, Hyogo University of Teacher Education* 2014;44:9–21.
35. Komatsu H, Yagasaki K, Shoda R, et al. Repair of the threatened feminine identity: experience of women with cervical cancer undergoing fertility preservation surgery. *Cancer Nurs* 2014;37(1):75–82.
36. Kumar AR, Schapira L. The impact of intrapersonal, interpersonal, and community factors on the identity formation of young adults with cancer: a qualitative study. *Psychooncology* 2013;22(8):1753–1758.
37. Mardani-Hamoooleh M, Heidari H. Cancer patients’ effort to return to normal life: a hermeneutic study. *Scand J Caring Sci* 2017;31(2):351–358.
38. Belpame N, Kars MC, Beeckman D, et al. The 3-phase process in the cancer experience of adolescents and young adults. *Cancer Nursing* 2018;41(3):E11–E20.
39. Cook O, McIntyre M, Recoche K, Lee S. Experiences of gynecological cancer patients receiving care from specialist nurses. *JBIR Database System Rev Implement Rep* 2017;15(8):2087–2112.

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