

Experiences of Cancer Survivors Returning to Work in Korean Society: A Qualitative Study

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Purpose: This study aimed to comprehensively understand and investigate the various challenges that Korean cancer survivors experience when returning to work (RTW). **Methods:** This study employed qualitative content analysis based on in-depth interviews to comprehensively understand and investigate the various issues faced by Korean cancer survivors when RTW. **Results:** The cancer survivors' RTW experiences were categorized into five themes: "Difficulties in work life due to social awareness of cancer," "Difficult and complex administrative procedures for RTW," "Facilitators for RTW," "Barriers to RTW," and "Demands for a successful RTW," with a total of 11 sub-themes and 35 codes. **Conclusion:** Cancer survivors should strive to accurately recognize their individual physical changes to ensure a successful return to work. Moreover, accommodating cancer survivors in the workplace by providing flexible work schedules or offering sick leave, while considering their health status, can help promote successful RTW outcomes.

Key Words: Cancer survivors, Neoplasms, Qualitative research, Return to work

INTRODUCTION

Over 3.8 million new cancer cases are diagnosed annually in Europe, with approximately 50% occurring in individuals of working age.¹⁾ In South Korea, more than 1.85 million cancer survivors owe their survival to advances in cancer prevention, early detection, and treatment. As a result, an increasing number of people are living longer after a cancer diagnosis.²⁾ Many of these patients are expected to become long-term survivors, balancing routine life and work.³⁾ The increase in cancer survival rates has led to a growing interest in the quality of life (QoL) of post-treatment survivors.⁴⁾ Despite improved survival rates, many patients continue to face long-term symptoms and disabilities, such as fatigue and physical limitations.⁵⁾ Other patients also experience physical and cognitive damage, anxiety, and fear of cancer recurrence, even after full recovery.⁶⁾

The QoL of cancer survivors is lower than that of healthy individuals, and returning to work (RTW) has been shown to im-

prove their QoL.^{6,7)} RTW has been shown to positively impact cancer survivors economically and physically. It is an important factor that affects cancer survivors' QoL.⁸⁾ Inability to work can disrupt daily life, decrease confidence, and increase social isolation.⁹⁾ Employment is an important aspect of QoL for cancer survivors, yet it can be challenged by cancer symptoms and difficulties associated with cancer treatment.³⁾ Many survivors have had to leave their full-time jobs during treatment or rehabilitation, and many express a desire to return to work afterward.¹⁰⁾ However, approximately 20% of cancer survivors in Korea still experience workplace discrimination, which correlates with higher unemployment rates among this group.¹¹⁾

For both employers and society, encouraging cancer survivors to RTW whenever possible is economically important.¹²⁾ Furthermore, an increasing interest exists in improving RTW outcomes for cancer survivors.^{10,12)} Research is ongoing in numerous countries to improve RTW rates through various interventions, such as education, counseling, discussion, and physical activities.^{4,13)} Several studies have shown diverse representations and practices among breast cancer experts in supporting breast cancer survivors' RTW. However, cancer survivors consistently face barriers and challenges in this process, including the inability to take sick leave regularly and negative attitudes and responses from co-workers and managers.¹⁰⁾ Most studies have focused on quantifying and measuring the problems that cancer survivors experience at work,

*This study employed a qualitative research design utilizing in-depth interviews.

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such as predicting RTW outcomes for patients with colorectal and breast cancers, or examining the mediating factors affecting RTW for cancer survivors.¹³⁻¹⁵ Although some qualitative synthesis studies have explored the experiences of cancer survivors RTW, they fail to reflect the low RTW rates and distinct work culture of Asian countries, including Korea.¹⁶ The physical, psychological, and social experiences of cancer survivors who RTW are complex and diverse. Therefore, a holistic exploration using qualitative approaches is necessary to gain a comprehensive understanding of their experiences and determine the most relevant issues for successful RTW outcomes. This study aimed to comprehensively understand and explore the various issues that Korean cancer survivors experience during the RTW process.

METHODS

1. Research design

This study employed qualitative content analysis based on in-depth interviews to comprehensively understand and explore the various issues faced by Korean cancer survivors when RTW.

2. Participants

The study participants were cancer survivors who had returned to work after being diagnosed with cancer or who had previous experience with RTW post-diagnosis. The inclusion criteria required participants to be adults aged 18 years or older, have been diagnosed with cancer, and be employed at the time of their diagnosis. We also included individuals who had ceased economic activities due to certain circumstances, such as sick leave, personal leave, or business closure, as well as those who continued economic activities after their cancer diagnosis. All participants understood the objectives of the study and voluntarily consented to participate. The exclusion criterion was an inability to communicate for more than 30 min due to various problems, such as pain. To recruit participants, we posted the study description and participation notice on the bulletin boards of three major online self-help groups for cancer survivors in Korea. These groups included approximately 50,000–120,000 survivors of various cancers, including thyroid and breast cancers. Individuals who expressed interest in participating were contacted and provided with instructions on how to participate in the interview via telephone. In

qualitative research, although fixed requirements for the number of subjects do not exist, multiple case studies are generally considered more persuasive than single case studies. This approach is particularly suitable when the researcher aims to investigate the same phenomenon across various situations or through multiple subjects.¹⁷ During the two-week posting period, 20 individuals contacted the researcher via the internet and text messages. Finally, 14 participants completed the interviews, while six withdrew due to personal circumstances or worsening symptoms.

3. Data collection

Qualitative interviews included semi-structured questions. The study utilized semi-structured in-depth interviews as the main method for data collection. The approach was selected for its suitability in addressing particular issues when the research focus is already relatively defined.¹⁸ The interview format was adapted to consider the coronavirus disease 2019 (COVID-19) pandemic and the immunocompromised status of cancer survivors, providing participants with the option to participate either online or offline. All participants chose to engage in online interviews, which were conducted via Zoom (Zoom Video Communications, San Jose, USA). These interviews were performed three times from May 10 to May 15, 2021, according to the participants' preferred schedules.

To develop the interview questions, the research team initially clarified the research questions, then generated draft questions, which were refined through discussions with colleagues and qualitative analysis experts. The questions included introductory, transitional, key, and closing questions. The semi-structured questions used in the interviews are as follows: "Can you tell us about the circumstances in which you returned to work after being diagnosed with cancer?"; "What was the most difficult situation you faced when you returned to work?"; and "How did you adapt to and cope with the difficulties during or after returning to work?" Based on these initial questions, the researchers added questions to suit each individual and conducted interviews. Participants were encouraged to fully share their experiences and emotions, facilitated by the researchers' empathetic responses.

The interview process was aligned with the participants' responses, and the researcher asked relevant follow-up questions to obtain further details about their psychosocial adaptation experi-

ences. All interviews were conducted at the convenience of the participants. During the first, second, and third interviews, ten, one, and three participants, respectively, engaged in the sessions. These interviews were conducted in three groups, with the group size varying from one to ten participants. Each interview lasted approximately 90~120 min. A researcher with extensive qualitative research experience led the interviews, and a research assistant recorded the audio on two devices to prevent data loss. Another researcher took notes on both verbal and nonverbal expressions. The participants verified the researchers' understanding and interpretation of these notes at the end of each interview. Afterward, the researchers discussed key information from the interviews and, if any ambiguities arose, clarified them through follow-up telephone calls.

4. Data analysis

All collected data were processed for qualitative content analysis in accordance with Graneheim and Lundman.¹⁹⁾ The audio recordings of the interviews were transcribed verbatim. To ensure the accuracy of the transcriptions, the researchers checked aspects such as facial expressions, tone, and mood against the Zoom video recordings. Once the recordings were transcribed, the transcriptions were repeatedly read and segmented to identify sentences that best conveyed the meaning and context. The researchers aimed to understand the overall content, meaning, and tone of the participants' experiences and extracted statements that seemed to capture the essential experiences and meanings of the participants. From these extracted sentences, more abstract and universal meanings were derived. Subsequently, a theme that encompassed the participants' entire experience was selected based on these derived meanings.

The segmentation process was conducted in consultation with peer researchers to increase credibility. Subject-related words were then collected based on the segmented data, and sentences were analyzed using open coding. This process was guided by a consensus reached during peer consultations. Finally, the researchers performed coding classification by identifying associations among five themes, 11 sub-themes, and 35 codes. The transcript was reread to ensure that the results reflected the participants' experiences and that the researchers had distinguished their own biases from the participants' experiences during data collection and analysis.

5. Trustworthiness

To ensure the validity of this study, the researchers adhered to the rigorous evaluation criteria suggested by Lincoln and Guba.²⁰⁾ First, to satisfy the credibility criterion, all interview sessions were meticulously transcribed from recorded conversations, ensuring no content was missing. Any transcript containing inaccuracies was rechecked by the relevant participant. Researchers reached a consensus through several rounds of iterative discussions during the topic extraction process. Second, to ensure transferability, this study documented detailed information on the data collection methods, periods, and participants. Third, to ensure dependability in post-data analysis, a professor with qualitative research experience reviewed and confirmed the analysis process and results. Finally, to meet the confirmability requirements, researchers organized their biases and assumptions to distinguish their perceptions from the participants' experiences during data collection and analysis.

6. Ethical consideration

This study was approved by the institutional review boards of the authors' affiliated institutions (IRB No.1041078-202103-HRSB-072-01). Before the interviews, participants were informed about the research purpose, their right to withdraw, and the measures taken for confidentiality and anonymity. All participants provided written informed consent before participating in the interviews. Interview content and transcripts were coded, encrypted, and stored in secure, locked locations in accordance with institutional review board guidelines.

RESULTS

The 14 participants were aged between 36 and 60 years, with a mean age of 46.1 years. general characteristics of the patients are presented in Table 1. Among the participants, two were men and 12 were women. Eleven patients had breast cancer, while the remaining patients had lung, rectal, or esophageal cancers. One patient had cancer that had metastasized to the lungs. At the time of their cancer diagnosis, 10 participants were employed and continued to work in the same workplace after treatment, two changed jobs, and the other two quit their jobs. Eight participants were white-collar workers. The time since cancer diagnosis

among the participants ranged from 1 to 15 years (Table 1).

Based on the results of the interview analysis, the RTW experiences of cancer survivors were categorized into 5 themes, 11 sub-themes, and 35 codes. The participants experienced complicated administrative procedures following their RTW owing to social awareness of cancer. They experienced either successful or challenging RTW processes influenced by workplace return facilitators and barriers and expressed the need for mechanisms to support successful RTW (Table 2).

1. Difficulties in work life due to social awareness of cancer

The participants reported various RTW experiences. Due to negative social perceptions of patients with cancer, they experienced many workplace difficulties, including emotional stress and diminished self-esteem. Social awareness acted as an external and internal factor that complicated the work lives of the participants.

1) Negative view from colleagues and society: Stigma

Participants perceived themselves through the gaze of coworkers

and society and experienced external negative feelings. They were also burdened with questions from their colleagues about continuing to work despite being patients with cancer. One participant chose not to disclose her cancer diagnosis due to the prejudices of her colleagues.

There are three breast cancer patients I know at my company, and one of them has the same condition as I [do]. [She] has done all the chemotherapy and radiotherapy, yet she [still] works very hard. However, [our] colleagues said, "If she works like that now, won't her cancer recur?" [The] people who say that [they] do not know [that] I'm also a breast cancer patient... While doing that, I thought to myself that I was really sensible for not openly disclosing my cancer status. There's nothing these people can do to help me if I reveal it. (Participant 6, Woman, age 56)

Sometimes, individuals felt hurt by an environment that dismissed their cancer diagnosis and faced difficulties in finding jobs due to prejudice against their status as patients with cancer.

Table 1. General Characteristics of the Participants

(N=14)

Participant	Age (year)	Sex	Cancer type	Employment status (current)	Type of job	Time since diagnosis (year)	Leave of absence after diagnosis
1	45	Female	Breast cancer	Y	Nurse assistant	15	2 years
2	37	Female	Breast cancer	Y	Office worker	2	1 month
3	57	Female	Breast cancer	Y	Bank teller	1	N/A
4	36	Female	Breast cancer	Y	Teacher	4	6 months
5	54	Female	Breast cancer	Y	Office worker	3	2 years
6	56	Female	Breast cancer	Y	Service provider	3	2 years
7	36	Female	Breast cancer	N	-	3	N/A
8	46	Female	Breast cancer	Y	Bank teller	1	9 months
9	41	Female	Breast cancer	N	-	5	N/A
10	42	Female	Breast, Lung cancer	Y	Teacher	13	3 months
11	52	Male	Esophageal cancer	Y	Security	5	1 years
12	42	Female	Breast cancer	Y	Social worker	1	N/A
13	42	Male	Rectal cancer	Y	Nutritionist	3	3 years
14	60	Female	Lung cancer	Y	Cashier	4	8 months

N= No; N/A= Not applicable; Y= Yes.

Table 2. Categorization of Themes on the Adaptive RTW Process among Cancer Survivors

Theme	Sub-theme	Codes
Difficulties in work life due to social awareness of cancer	Negative view from colleagues and society: Stigma (External factors)	· Colleagues' perception of cancer patients · Not telling at my workplace that I have cancer · Social perception of a cancer patient · Social perception that cancer is trivialized · Difficulty in finding a job due to the prejudice against cancer status
	Diminished self-esteem (Internal factors)	· Decreased self-esteem due to the words and actions of colleagues · Uncomfortable feeling with the word "survivors" · Inferiority complex against consideration for others · Feeling of alienation from being a cancer patient
Difficult and complex administrative re-turning to work procedures	Issues related to the workplace circumstances	· Difficulties with complex sick leave processes · Lack of policy on returning cancer survivors to work · Lack of jobs for cancer survivors to adapt to society
	Difficulties associated with cancer treatment	· Difficulty juggling between hospital treatment system and work life · Unreasonable system for returning to work · Inadequate operation of a state-run cancer patient survival center
Facilitators for return to work	Motivation and meaning of re-turn to work	· Expectations of return to work · Returning to work makes me forget the pain · Return to work for financial reasons
	Changed values after a cancer diagnosis	· Turning point in life · Acknowledgment of my life and myself
	Daily self-care behavior	· The importance of fitness management · My own efforts for mental health care and self-reliance · My own efforts to re-socialize
Barriers for return to work	Physical and mental difficulties due to return to work	· Physical hardship after returning to work · Ambivalence about returning to work · Fear of going back to work
	Efforts/struggle for sick leave based on work conditions	· Differences in return to work by type of work · Unguaranteed sick leave · Struggle for leave of absence
	Difficulties in the treatment process are more severe than expected	· Endless negative thoughts · Depression and embarrassment due to unexpected plan · Difficulty in maintaining work due to cancer symptoms · Psychological burden of treatment results for job retention
Demand for a successful return to work	Help getting back to work	· Psychological counseling to overcome the trauma · The need for a support system that can realistically help to return to work

RTW= return to work.

There are many prejudices in this regard. In fact, it was difficult to get a job... Cancer could recur suddenly. Honestly, even if I were an employer, I think I would be a little reluctant to hire cancer patients. You never know when they might get sick. (Participant 11, Man, age 52)

because of their cancer, they experienced a decline in self-confidence. "The term 'cancer survivor' made me feel like someone who should have died," reported one of the participants.

After I quit, I heard someone say, 'Ms. OO is good, but it's hard to get her to work because she's sick.' My confidence plummeted upon hearing this. (Participant 9, woman, age 41)

The term 'cancer survivor' sounds like we are alive although we were supposed to die... it seemed like we were hurt by that one term. (Participant 6, woman, age 56)

2) Diminished self-esteem

The negative social perceptions of patients with cancer reduced their self-esteem. When participants heard comments from colleagues suggesting that they could not be assigned much work

The consideration from others led to discord with colleagues due to its complexity. Furthermore, participants felt alienated from their peers because they were patients with cancer.

When I felt that people I had interacted with before were hesitant about meeting or maintaining a relationship with me, although I did not personally pay much attention to them, these aspects were a bit difficult. (Participant 5, woman, age 54)

2. Difficult and complex administrative RTW procedures

Complicated procedures for sick leave at work made it difficult for participants to manage their cancer treatment while maintaining their jobs. These difficulties stemmed from work-related factors and challenges encountered during treatment.

1) Issues related to workplace circumstances

Participants reported experiencing difficulties with complex administrative procedures related to their work. For example, they found the company's requirements for taking a leave of absence to be complicated, particularly due to the lack of policies for accommodating RTW of patients with cancer. One participant noted:

At a certain point, how long is the sick leave required? The diagnosis, including the sick leave period, must be obtained before we can find a substitute. Only then can we ask the higher department. I just started treatment now, and there was no such plan, so I had to rush to my physician because I had to return on time. (Participant 4, woman, age 36)

2) Difficulties associated with cancer treatment

Participants felt it was difficult to balance the cancer treatment process with work responsibilities. This was inconvenient because regular check-ups and obtaining results could not be completed in a single day. Moreover, acquiring medical certificates for leaves of absence posed additional challenges. Another participant shared:

If I go to the hospital for a regular checkup, I have a checkup, and I have to go again the next week to get the re-

sult. I have to use two leaves. So, when I want to personally use a leave to rest, there are several cases where I cannot. (Participant 7, woman, age 36)

3. Facilitators for RTW

Participants were motivated by their expectations of the RTW concept. Moreover, positive changes in their values and self-care after a cancer diagnosis had a positive effect on their RTW experiences.

1) Motivation and meaning of RTW

Participants had high expectations regarding RTW and were enthusiastic about being able to engage in activities again. Despite feeling tired after RTW, they found that it helped them forget their cancer-related pain.

I was very delighted and grateful to be able to return [to] and continue working. Of course, at first, it was a little difficult to get around due to fatigue, but it was very rewarding because I felt I could do something again by just returning to work. (Participant 8, woman, age 46)

2) Changed values after a cancer diagnosis

Participants perceived a cancer diagnosis as a turning point in their lives, reporting positive changes in their values. They considered cancer as a challenge for the remainder of their lives and gained a deeper appreciation for life and self-awareness.

I am in good health, and I am enjoying my work life. I commute by bike and engage in volunteer work for the visually impaired. Since returning to work, I have felt that the pain has become a turning point in my life, making every single moment precious and enjoyable. (Participant 5, woman, age 54)

3) Daily self-care behavior

Although participants commonly complained of fatigue, they were "trying" to RTW through "efforts" through efforts to manage both their physical and mental health, as well as maintain their independence. They expressed that the effort to re-socialize during their sick leave contributed to their ability to RTW.

I am deliberately walking, even at work. I walk more than 10,000 steps daily, which is most important to me. I try to walk more than 10,000 steps unconditionally. (Participant 11, man, age 52)

I studied PowerPoint and other things during my sick leave. I studied the analysis methods and report formats. When I re-entered the company, tasks like preparing proposals became a little easier. So, when I started re-socializing, I thought I needed to put some effort to not lose that sense of readiness. (Participant 13, man, age 42)

4. Barriers to RTW

Participants experienced mental stress and physical hardship during cancer treatment and throughout the RTW process. They found it difficult to RTW and maintain their positions due to varying rules regarding sick leave and leaves of absence, depending on the workplace situation.

1) Physical and mental difficulties due to RTW

Although the participants were welcomed back to work, they experienced severe fatigue and ambivalence because of physical difficulties and concerns about cancer recurrence. Furthermore, they expressed skepticism about RTW.

When I was returning to my job this time, I really wanted to work. However, when I actually went back, I felt very exhausted, both physically and mentally.... It's good to be back at work and have my life return to normal, and my depression is gone. However, I'm too fatigued at work, which makes me question whether I'm getting tired of my job. (Participant 4, woman, age 36)

2) Efforts/struggles for sick leave based on work conditions

The availability of guaranteed sick leave varied depending on the work situation. In some cases, sick leave for treatment was not guaranteed, forcing participants to retire. In some cases, they could not take a leave of absence due to the lack of available replacements.

People who do physical work have a hard time returning to work, whereas those who work in white-collar jobs are

more likely to RTW. Even when cancer patients return to society, there are differences. Just as the rich get richer and the poor get poorer, a similar pattern seems to exist here. (Participant 11, man, age 52)

3) Difficulties in the treatment process are more severe than expected

Participants felt physically exhausted during the chemotherapy process, which increased their time alone at home and led them to develop negative thoughts.

As I'm not working, I've only had bad thoughts about recurrence and metastasis. It should be positive, but the longer I spend at home, the more time I waste on TV programs... I have many negative thoughts. (Participant 6, woman, age 56)

After RTW, participants faced many difficulties in maintaining their jobs due to cancer-related symptoms. Moreover, while waiting for results after regular checkups, they experienced psychological stress about whether they could continue working.

Also, as the time for checkups approaches, I worry that if something else happens this time, I might need to take a leave of absence or resign. If everything is okay, I think I'll be able to work for another 6 months... I imagine this cycle will continue until I die. (Participant 2, woman, age 37)

5. Demands for a successful RTW

Participants expressed a more progressive approach to achieving successful RTW based on the many difficulties they had experienced.

1) Help getting back to work

Participants emphasized the necessity of psychological counseling to overcome trauma and the importance of a social support system for RTW. Furthermore, they mentioned the need for practical assistance, such as guidance on diet and exercise, and highlighted the importance of changing social perceptions.

I have consulted with experts several times. It was not much, but the consultations really helped me. For example,

when I attended, they were conducting role-playing exercises.... At that moment, I realized I was experiencing significant changes. (Participant 5, woman, age 54)

I want to know more realistic ways to apply these things when I do not have time to exercise or manage my diet due to daily life. I cannot do this on my own, but if there were data showing that this approach has worked for others, I would be more likely to follow it. However, I cannot find such data. (Participant 12, woman, age 42)

DISCUSSION

This study was conducted to explore how cancer survivors adapt to physical, psychological, and social challenges as they RTW and to provide basic data for developing interventions to support them. Cancer survivors experienced difficulties in their work lives due to a lack of social awareness about the disease. External factors included negative social perceptions and prejudice against cancer, while internal factors involved discomfort with the label "survivor" and feelings of complexity due to the consideration of others. Many Koreans believe that patients with cancer cannot contribute to society because of perceived reduced productivity and are reluctant to work with them.³⁾ Survivors who reported experiencing discrimination from colleagues were twice as likely to lose their jobs as those who did not have such experiences.¹¹⁾ This bias negatively impacts the employment stability of cancer survivors. Furthermore, patients with cancer who experienced social discrimination were more likely to suffer from depression.²¹⁾ These results highlight the need to reduce society's negative attitudes toward cancer. People who demonstrate empathy toward cancer survivors tend to have fewer negative attitudes. The more interest the public shows in cancer survivors, the more information they acquire about them, leading to a better understanding of their experiences.²²⁾ To reduce negative perceptions and biases against cancer survivors, appropriate education and public awareness campaigns are necessary to increase public interest. These efforts address the sub-theme of "Negative view from colleagues and society: Stigma." In addition to changing social awareness, developing and implementing mental health programs for cancer survivors RTW may help restore their self-esteem.

In particular, the survivors mentioned that they felt negatively

about the term "cancer survivor." The National Coalition for Cancer Survivorship, established in 1986, defined a "cancer survivor" as "a cancer patient from the moment of diagnosis and for the balance of his or her life, regardless of the ultimate cause of death." However, in many countries, this term is not always interpreted positively by patients; for some, it serves as a reminder of a high risk of death that does not reflect their actual experience.²³⁾ When translated into Korean, the term can carry a negative connotation, implying someone who continues to live despite having come close to death. Most respondents preferred to be referred to as "someone who experienced cancer." As cancer survival rates increase, expanding the meaning of "cancer survivor" to encompass the process and challenges of adapting to a new life after treatment, rather than limiting it to the concept of a "complete cure" from the disease, is necessary.

Notably, RTW is important for both patients with cancer and society. From an individual perspective, employment is an important component in restoring economic stability and self-respect.²⁴⁾ From a societal viewpoint, encouraging RTW among patients can help reduce social costs by supporting the labor participation of patients with cancer who are capable of productivity.¹²⁾ However, we found that participants experienced difficulties due to the complex administrative procedures involved in maintaining their jobs. For example, in the sub-theme "Issues related to workplace circumstances," the company's requirements for sick leave were complicated, and the lack of related policies made it more difficult for employees to take sick leave.

Unlike in South Korea, the United States classifies patients with cancer as individuals with disabilities. The Americans with Disabilities Act Amendments Act provides a comprehensive definition of long-term functional impairments and advocates for addressing environmental factors such as stigma and discrimination related to the employment of cancer survivors.²⁵⁾ In 2016, Japan's Ministry of Health, Labor, and Welfare issued guidelines for workplaces to support patients with cancer in balancing treatment and work-life. These guidelines allow patients to submit a doctor's note to their employer, enabling necessary accommodations, such as flexible working arrangements, sick leave, and adjusted work hours.²⁶⁾ However, in South Korea, Article 7 (1) of the Framework Act on Employment Policy only states that individuals should not face discrimination based on illness unless a

reasonable justification exists. It does not provide details on sanctions for discrimination. Despite a five-year survival rate of more than 70.4% in South Korea, no active policy specifically supporting cancer survivors in the workplace has been established.²⁾

The expectation of RTW and facing challenging workdays helped participants overcome the pain of cancer and navigate difficulties. This finding aligns with previous research indicating that cancer survivors achieve work-life balance through RTW.⁹⁾ For survivors, RTW holds significance beyond economic necessity; it contributes to their sense of being "healthy," fosters social belonging, and aids reintegration into daily life.^{9,10)} Our results also showed that cancer survivors were glad to work again, despite the physical burden it imposed on them.

Studies have shown that posttraumatic growth positively affects health-related QoL in cancer survivors. An individual's ability to cope with difficulties may improve during the process of cancer diagnosis and treatment.²⁷⁾ Participants also regarded a cancer diagnosis as a turning point in their lives, which led them to acknowledge and accept themselves as patients with cancer while understanding the importance of life. Furthermore, positive changes in personal values contributed to their ability to cope with cancer and facilitated their RTW. To support cancer survivors' physical and mental health, medical institutions should be equipped with more comprehensive nursing facilities. Efforts should also be made to ensure that cancer survivors are aware of their changing physical conditions. These facilities should be integrated into a system that supports community activities and job-hunting, helping cancer survivors adapt to their new lives.

Barriers to RTW included "Ambivalence about RTW" and "Unguaranteed sick leave and struggle for leave of absence." Although participants returned to work with a positive attitude, they experienced significant fatigue and ambivalence due to physical hardships. Other qualitative studies on breast cancer survivors have similarly reported negative psychological conditions alongside positive attitudes toward disease acceptance and the pursuit of a new life.³⁾

The sub-theme, "Efforts/struggles for sick leave based on work conditions," was derived from these experiences. Cancer survivors experience fatigue and report difficulties in adapting to work life.²⁴⁾ However, guaranteed sick leave status varied among our study participants depending on their work situations. The

criteria for recognizing paid sick leave differ across workplaces in South Korea.³⁾ The selection of study participants depended on the type of job, but most were unable to freely take sick leave during treatment. Research has revealed that a major problem faced by patients after RTW is the impact of cancer and its treatment on work performance.⁹⁾ These impacts include not only physical problems, such as fatigue, but also cognitive limitations, such as attention and memory loss, which can persist long after treatment.²⁸⁾ The Amended Americans with Disabilities Act of 2008 proposed that employers should allow for flexible working conditions, including options to work from home, take periodic sick leave, and have modifications to work styles.²⁹⁾ However, South Korea has yet to establish a similar system. As a result, some participants in the study had to leave their jobs due to the lack of guaranteed sick leave. They recognized the need for practical accommodations to facilitate their return to daily life, supported by various forms of institutional aid. Therefore, various approaches are required, such as introducing flexible work systems tailored to health conditions and ensuring sufficient rest periods to support RTW.²⁸⁾

Some participants indicated that they had no choice but to rely on inaccurate sources, such as information found on the Internet, due to a lack of accurate knowledge transfer channels for cancer survivors regarding RTW or treatment processes. They also reported difficulties in finding reliable data and determining what to believe because the information provided by hospitals and oriental medicine practitioners differed. Most cancer survivors who used complementary and alternative medicine (CAM) were satisfied with their use.³⁰⁾ However, the majority of CAM users did not discuss their CAM use with their doctors. Cancer survivors who experience more symptoms or long-term effects from cancer treatment may seek CAM for physical or psychological relief.³⁰⁾ Therefore, medical teams should listen to patients' needs, concerns, and intentions regarding CAM use and play an active role in providing accurate information and monitoring possible interactions. Participants also expressed that psychological counseling was necessary to overcome the trauma of experiencing cancer, and those who received counseling reported positive changes throughout the process. This indicates that cancer survivors' RTW programs should include psychological counseling and ensure the provision of necessary information through

sufficient communication with medical staff.

This study had some limitations. First, since we explored the common experiences of cancer survivors regarding their RTW through online interviews, the findings may differ from those obtained through offline, face-to-face interviews. Second, only the experiences of cancer survivors were explored. Including perspectives from other relevant individuals, such as family members, colleagues, and healthcare staff, could provide additional insights. Finally, due to the nature of online interviews, only facial expressions and upper body language could be observed through the monitor; therefore, unlike face-to-face interviews, data collection on the participants' overall expressions may have been limited. Despite these limitations, this study is significant because it provides a comprehensive understanding of the experiences of various types of cancer survivors in Korea during their RTW. For future studies, we suggest more in-depth research on RTW among cancer survivors using phenomenological analysis and other methodologies.

CONCLUSION

This study is important because it focuses on the exploration and understanding of the physical, psychological, and social adaptations of cancer survivors in Korea as they RTW. RTW has been shown to positively affect cancer survivors both economically and physically. However, cancer survivors in Korea have experienced difficulties in RTW and maintaining employment. This study found that negative social perceptions and physical difficulties among cancer survivors hindered their RTW. By changing social awareness and developing mental health programs tailored to RTW, we may help restore cancer survivors' self-esteem.

Recognizing changes in themselves and their lives after a cancer diagnosis was a key factor in promoting RTW. Cancer survivors must endeavor to properly acknowledge and adapt to changes in their physical conditions to achieve successful RTW. Moreover, considering the health status of cancer survivors and providing reasonable accommodations in the workplace, such as flexible work schedules or sick leave, can promote successful RTW outcomes.

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Conflict of interest

The authors declared no conflict of interest.

Authorship

Study conception and design acquisition - KK; Data collection - YH and OB; Analysis and interpretation of the data - KK, YH and OB; Drafting and critical revision of the manuscript - KK, YH and OB.

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Data availability

Not applicable.

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