Wiley
European Journal of Cancer Care
Volume 2025, Article ID 3735839, 9 pages
https://doi.org/10.1155/ecc/3735839

WILEY

*Research Article*

# Public Attitudes Toward Cancer Survivors Returning to Work: A Qualitative Study

**Jun Luo**,[1] **Yu Qi Jiang**,[1] **Yue Shi**,[1] **Dan Chen**,[2] **Wen Qin**,[3] **Qin Zhu**,[3] **and Yu Jie Guo**[1]

[1]*School of Nursing and Rehabilitation, Nantong University, Nantong, China*
[2]*Department of Thoracic Surgery, Nantong Hospital of Traditional Chinese Medicine, Nantong, China*
[3]*Department of Operating Room, Affiliated Hospital of Nantong University, Nantong, China*

Correspondence should be addressed to Yu Jie Guo; jyg@ntu.edu.cn

Received 12 September 2024; Accepted 28 April 2025

Academic Editor: Tarcilia Silva



**Introduction:** Cancer survivors with adequate social support often show increased motivation to return to work. While prior research has explored the determinants of return to work among cancer survivors, there is a paucity of studies focusing on public attitudes toward their reintegration into the workplace, particularly those attitudes shaped by social and cultural factors.
**Methods:** This study is qualitative, grounded in social support theory. We employed a semistructured interview approach to engage 28 public members in Jiangsu Province. Data were analyzed thematically using both inductive and deductive methods.
**Results:** The public attitudes toward cancer survivors returning to work encompass six themes and twelve subthemes: (1) work ability (ability diminished and changing jobs or positions), (2) health status (enhancing physical and mental health and adverse effects on physical and mental health), (3) support system (policy support, employer's support, and colleague and family support), (4) returning to family, (5) self-realization (self-reconstruction and physical and mental reintegration), and (6) pressure from colleagues and leaders (interpersonal relationship pressure and psychological burden).
**Conclusion:** The public exhibits a range of complex and diverse attitudes toward cancer survivors resuming employment, influenced by underlying social, cultural, and psychological factors. While there is widespread understanding and support, concerns and anxiety also persist. This multifaceted perspective mirrors the intricate perceptions of cancer and its ramifications. Nurses play a critical role in facilitating the reintegration of cancer survivors into the workforce by identifying factors that either facilitate or impede this process. By recognizing and addressing these factors, nurses can significantly support the return to work of cancer survivors.

**Keywords:** cancer survivors; public attitudes; return to work

## 1. Introduction

Cancer has emerged as a critical public health issue globally [1]. The 2020 report from the International Agency for Research on Cancer reveals that approximately 50.6 million patients have surpassed the five-year survival threshold [2]. Recent statistics indicate that 40% of new cancer cases occur between the ages of 20 and 64 [3, 4]. These individuals face health crises during their most productive years, often resulting in job loss [5]. Return to work (RTW) represents a significant transition for individuals seeking to restore their work capabilities after an illness or injury, offering substantial personal and societal benefits [6].

Previous qualitative studies indicate that managing the RTW process poses significant difficulties for employers [7], with managerial attitudes often skewed negatively toward the capabilities of cancer survivors [8]. Moreover, surveys have identified labor-management relations as potential hurdles in the RTW trajectory [9]. Despite a shared goal of successful RTW between employers and employees, various obstacles complicate the process [10]. Employer readiness to support is influenced by precancer perceptions of

employees, mutual objectives, and the presence of national or organizational policies aiding RTW management [7].

There is limited research on RTW for cancer survivors, mainly from the perspectives of their family members [11, 12]. Studies [13] indicate that family members are circumspect in their decision making about RTW, offering support when survivors are eager to return, even if they believe it is premature or ill-advised. In discussions of RTW, some family members express concerns that work might not only distract survivors but also add stress and various challenges that could hinder their full engagement in recovery. Other family members contend that employment can be advantageous, aiding the recovery process through the psychological benefits of work or based on their understanding of the personality and needs of the survivor [14, 15].

This study is based on social support theory, which postulates that an individual's ability to navigate adversity is dependent on access to instrumental, emotional, and informational support systems [16]. Social support theory provides a powerful framework for dissecting the interplay between social structures (e.g., employer policies and healthcare resources) and interpersonal dynamics (e.g., family encouragement and coworker empathy) [7]. This dual perspective support mechanism is ideally suited to serve as the theoretical foundation for this study.

Existing literature has examined RTW barriers primarily from the perspectives of survivors and employers [17, 18], but public attitudes (a key determinant of social acceptance) remain unexplored. Consequently, this study conducted qualitative interviews with members of the general public to explore their attitudes toward cancer survivors returning to work and to elucidate the underlying factors that shape these perceptions.

## 2. Method

*2.1. Study Design.* The goal of this study is to focus on describing the phenomenon rather than constructing a theory; therefore, a qualitative descriptive research design was used to explore the perceptions of the general public concerning the reintegration of cancer survivors into the workforce. In addition, the qualitative descriptive method is well-suited for capturing the nuances of public sentiment and providing a rich, textured account of the social phenomena under examination [19]. This approach was selected to allow for an in-depth exploration of the participants' attitudes, beliefs, and the factors that may influence their views on cancer survivors' RTW.

*2.2. Study Participants and Sampling.* A total of 28 participants from Jiangsu Province, China, were enrolled in this study between January 2024 and April 2024. The inclusion criteria were as follows: (1) aged 18 years or older, (2) individuals with direct or indirect contact with cancer survivors, and (3) willingness to participate in the study, as evidenced by signed informed consent. Exclusion criteria included (1) lack of work experience and (2) inability to understand or express oneself. Purposeful sampling was employed to ensure a diverse representation of sociodemographic factors, including age, gender, occupational category, educational background, and care experience, thereby enriching the data collected. Participants were selected based on pre-established criteria by trained members of the research team.

Recruitment was conducted through multiple channels such as WeChat or face-to-face recruitment to improve sample representativeness, during which researchers elucidated the study's objectives, procedures, and confidentiality principles. Participation was strictly voluntary, and informed consent was obtained in writing prior to any study-related activities. Data collection proceeded based on the principle of subject saturation to ensure comprehensive data acquisition. Data saturation was determined by the following criteria: (1) no new themes emerged from three consecutive interviews; and (2) variation within existing themes was adequately captured. The research team reviewed the data through weekly discussion sessions and terminated recruitment when saturation was confirmed.

*2.3. Determining the Interview Outline.* The interview guide was meticulously crafted following an extensive literature review, the findings of which are presented in Table 1. To refine interview techniques and ensure data quality, a pilot interview was conducted with two participants who met the inclusion criteria. This preliminary session was instrumental in evaluating the initial interview protocol. Post-pilot, the research team conducted a comprehensive debriefing to discuss the interview's procedural elements and to identify any issues. This introspective analysis facilitated the timely implementation of targeted modifications to the interview methodology. These enhancements were designed to enhance the precision with which interviewers could extract information and gauge the emotional responses of participants during the formal interviews. The iterative process of piloting, feedback, and subsequent adjustments was critical in optimizing the interview guide for the main study. This approach is consistent with best practices in qualitative research, ensuring that the data collected are both rich and contextually nuanced, thereby providing a robust foundation for the subsequent analysis of public perceptions regarding cancer survivors' RTW.

*2.4. Data Collection Methods.* Before the formal interview, all interviewers underwent a two-week standardized training program, including semistructured interview techniques. After screening candidates who met the specified criteria, the interviewer implemented several rigorous measures to ensure both the efficacy of the interviews and the comfort of the participants. Interviews were conducted primarily in private settings (e.g., community centers and participants' homes) to minimize disruption. For participants living in remote areas, encrypted videoconferencing was used after obtaining explicit consent and verifying a secure Internet connection.

The formal interview process began with the need for the interviewer to outline in detail the purpose and content of the interview, formally committing to confidentiality to

Table 1: Interview outline.

| Number | Content |
|---|---|
| 1 | What is your personal opinion on cancer survivors returning to work? |
| 2 | What factors do you think hinder cancer survivors from returning to work? |
| 3 | What factors do you think promote cancer survivors to return to work? |
| 4 | How do you think the public views cancer survivors returning to work? |

protect the rights and privacy of participants. Some of the questions were reordered and modified through pilot interviews ($n = 2$): broad attitudinal questions (e.g. "How does the public perceive RTW?") were moved to a later section to avoid triggering prejudice, while sensitive topics (e.g., "perceived discrimination") were opened with empathic statements. Medical terms (e.g., "reintegration") were simplified to colloquial terms (e.g., "return to work") based on participant feedback. A semistructured approach was used throughout the interviews, allowing flexibility in the order and wording of questions.

*2.5. Data Analysis Methods.* The recordings were transcribed into documents within 24 h after the interviews were completed, including relevant interjections. The recordings were repeatedly listened to in order to ensure transcription accuracy. Each interview lasted approximately 20–40 min.

*2.5.1. Data Collation.* Convert the recorded data into text: Following the principles of word-for-word transcription, timely conversion, and multiple backups, transcribe the recorded data into text files. Repeatedly listen to the recordings and review the transcribed text.

Create a file for the collected data: Document the data number, basic information of the research subject, the method and location of data collection, and relevant subject-related information, and save it properly.

*2.5.2. Data Analysis: Content Analysis Method Was Used.* Colaizzi's 7-step method was employed to analyze the interview data. The coding process was carried out by two researchers (JL and YQJ) who independently coded all transcripts using the NVivo 12 software. An inductive approach was used to avoid the imposition of pre-existing frameworks, with initial codes being generated directly from the language of the participants and then grouped into subthemes and themes through iterative discussion. Deductive analysis was selectively applied during the thematic refinement process by invoking social support theory. During the analysis process, the researcher must remain open and flexible, allowing new themes and ideas to emerge naturally. To resolve coding discrepancies, weekly consensus meetings were held and unresolved conflicts were adjudicated by a third researcher (YJG). The specific steps are as follows:

1. Carefully review all interview records, analyzing them word by word. Pay close attention to both the verbal and nonverbal cues of the interviewees, such as pauses and tone, to fully comprehend their perspectives, experiences, and emotions.
2. Extract key statements. Highlight or annotate statements related to returning to work, changes in work habits, challenges, and coping strategies to identify critical information that aligns closely with the research focus (cancer survivors returning to work).
3. Code recurring ideas. Assign consistent codes to similar ideas or experiences to identify common themes or patterns.
4. Summarize the coded opinions. Group opinions with identical or similar codes to generate an initial list of topics, integrate the information, and develop a more comprehensive understanding.
5. Write a detailed and comprehensive description. For each topic, provide a thorough description, including specific examples, quotes, and background information, ensuring that all critical information is captured in the analysis.
6. Identify similar viewpoints and extract thematic concepts. Compare and contrast the perspectives of different interviewees, identify commonalities and differences, and develop a more abstract and generalized thematic concept, further refining and clarifying the themes.
7. Verify with the original interview records. Cross-check the extracted themes and concepts with the original interview records to identify any omissions or misunderstandings, making necessary corrections to ensure the accuracy and completeness of the analysis.

*2.6. Ethical Considerations.* Before the interview, participants were informed about the purpose, content, significance, and procedures of the study. Participation was voluntary, with participants been informed of their rights to withdraw from the study at any time and providing written informed consent. Throughout the study, data containing personal information were coded to maintain confidentiality. Recorded files are stored encrypted, only the research team has access to the anonymized data, and the originals are destroyed after transcription. This study was approved by the Ethics Committee of the Affiliated Hospital of Nantong University, Ethics Number: 2024-K068-01.

*2.7. Trustworthiness and Credibility.* To enhance the reliability of this study, we recruited subjects with diverse characteristics until data saturation was achieved. After recording and organizing the data, the researchers promptly

verified any uncertainties with the respondents to ensure the authenticity and completeness of the information.

To mitigate potential researcher biases, the recordings were listened to repeatedly by the researcher to ensure that the transcripts matched the content of the original recordings, and a 2nd researcher proofread the transcripts for accuracy and completeness [20]. Each transcript was labeled according to the respondent number. Additionally, the researchers double independently coded themes and subthemes and then conducted a consensus discussion to resolve discrepancies to increase the reliability of the results. We also contacted some participants to verify the content again and asked if any corrections were necessary.

## 3. Results

This study conducted interviews with 28 members of the public from October to December 2022, identified as N1 to N28, totaling approximately 800 min of transcription time and over 50,000 words. The interviews were concluded once data saturation was achieved. The basic information of the interviewees is presented in Table 2.

The age distribution of the respondents was relatively balanced, encompassing all age groups from 20 to over 60 years. The largest group of respondents was aged 40–49, accounting for 28.57%, followed by those aged 30–39 and 50–59, each comprising 25%. The proportion of respondents aged 20–29 and over 60 was comparatively smaller, representing 17.85% and 10.71%, respectively. This age distribution enables a comprehensive understanding of the perspectives of different age groups on the issue of cancer survivors returning to work. The gender ratio of the respondents was evenly distributed, with males and females each accounting for 50%. This balanced gender ratio helps to avoid gender bias and provides a more accurate reflection of public attitudes toward cancer survivors returning to work. The respondents had a fairly diverse educational background, ranging from below high school diploma to graduate degree. Among the respondents, those with a college degree and a graduate degree were the most numerous, each accounting for 28.57%, followed by those with less than a high school diploma, accounting for 21.42%. Respondents with a graduate degree and a high school diploma were relatively few, each making up 10.71%. This educational background structure aids in understanding the perspectives of individuals with different educational levels on cancer survivors returning to work. Regarding occupational categories, the majority of respondents were nonmanual workers, accounting for 67.86%, while manual workers comprised 32.14%. In terms of positions, nonmanagers account for the vast majority, accounting for 64.28%, while managers account for 35.71%. The distribution of respondents' residential areas is relatively balanced, with urban and rural areas accounting for 57.14% and 42.86%, respectively. In terms of caregiving experience, the distribution is relatively even, with 42.86 and 57.14, respectively.

This study conducted interviews with the public to explore their perspectives on cancer survivors returning to work. Six main themes and twelve subthemes were identified, including work ability (ability diminished and changing jobs or positions), health status (enhancing physical and mental health and adverse effects on physical and mental health), support system (policy support, employer's support, and colleague and family support), returning to family, self-realization (self-reconstruction and physical and mental reintegration), and pressure from colleagues and leaders (interpersonal communication pressure and psychological burden).

### 3.1. Main Theme One: Work Ability

*3.1.1. Subtheme One: Ability Diminished.* In the context of this study, a subset of participants expressed reservations concerning the skills, expertise, and execution capabilities of cancer survivors in the workplace. The prevailing sentiment among these individuals was that the aftermath of cancer and/or surgical interventions might significantly diminish the survivors' work capacity or productivity. This perspective suggests a perceived reduction in the ability of cancer survivors to perform at preillness levels, potentially stemming from a lack of awareness or misconceptions about the resilience and recovery trajectories of individuals post-cancer treatment.

> N24: "I believe that changes in physical condition may have an impact on the work efficiency of cancer survivors. During the treatment process, some people may face fatigue and other physical discomfort, which may affect their performance at work."

> N9: "They may feel fatigued due to treatment side effects."

Concurrently, the study participants demonstrated an empathetic understanding of the potential changes in the work ability of cancer survivors. This recognition reflects an acknowledgment of the impact that cancer and its treatment may have on an individual's functional capabilities within a professional setting. Participants' empathetic stance suggests a nuanced view that takes into account the variability in survivors' experiences and the possible need for adaptability and support in the workplace. Such insights from the participants are valuable for informing workplace policies and interventions aimed at facilitating the return and retention of cancer survivors in employment.

> N18: "I believe that society should pay more attention to the work abilities of cancer survivors. Some people may face work challenges due to changes in their physical condition during treatment, and we should understand and support them in gradually adapting to the work environment."

*3.1.2. Subtheme Two: Changing Jobs or Positions.* Within the study, certain participants engaged in physically demanding occupations expressed the view that cancer survivors might not be able to adapt to their previous workloads. They suggested that it would be prudent for survivors to consider transitioning to less physically demanding roles or to seek

Table 2: Distribution of demographic and sociological data of respondents ($n = 28$).

| Project | | Number of people | Percentage (%) |
|---|---|---|---|
| Age (years) | 20–29 | 5 | 17.85 |
| | 30–39 | 7 | 25.00 |
| | 40–49 | 8 | 28.57 |
| | 50–59 | 5 | 17.85 |
| | ≥ 60 | 3 | 10.71 |
| Sex | Male | 14 | 50.00 |
| | Female | 14 | 50.00 |
| Education | Graduate degree | 3 | 10.71 |
| | University degree | 8 | 28.57 |
| | College degree | 8 | 28.57 |
| | High school diploma | 3 | 10.71 |
| | Below high school diploma | 6 | 21.42 |
| Occupational category | Manual workers | 9 | 32.14 |
| | Nonmanual workers | 19 | 67.86 |
| Position | Managers | 10 | 35.71 |
| | Nonmanagers | 18 | 64.29 |
| Domicile | City | 16 | 57.14 |
| | Countryside | 12 | 42.86 |
| Care experience | Yes | 12 | 42.86 |
| | No | 16 | 57.14 |

employment that offers a more accommodating work environment.

N1: "I think after all, they are cancer patients and usually have undergone surgery. Even if they return to their workstations, they may not be able to perform their original jobs, especially manual laborers."

N6: "As a manager, I think they should seek a relatively easier job."

### 3.2. Main Theme Two: Health Status

*3.2.1. Subtheme One: Enhancing Physical and Mental Health.* The participants in the study acknowledged that the health status of cancer survivors can significantly vary based on the location and nature of the tumor, which may subsequently influence their work capabilities and requirements for accommodation in the workplace. Furthermore, there was a consensus among the participants that maintaining harmonious relationships with colleagues is instrumental in fostering the physical and mental well-being of cancer survivors. This belief underscores the importance of a supportive work environment, which can contribute positively to the overall health and work engagement of survivors.

N18: "Some cancers, such as thyroid cancer, have minimal impact on the body, allowing patients to return to work."

N3: "I believe that maintaining harmonious relationships with colleagues benefits their mental health."

N18: "Returning to work provides them with a sense of purpose, helps divert their attention from the disease, and allows them to temporarily forget their illness, which contributes to an improved sense of well-being."

*3.2.2. Subtheme Two: Adverse Effects on Physical and Mental Health.* A subset of participants in the study expressed caution concerning the potential negative implications of returning to work for cancer survivors' physical and mental health. These individuals posited that fatigue, an often-inevitable consequence of cancer and its associated treatments, could exert deleterious effects on the health status of survivors, potentially culminating in a pernicious cycle of decline.

N11: "I believe that returning to work may not be conducive to recovery and could potentially accelerate the progression of the disease."

N9: "I think cancer survivors might encounter various physical challenges after resuming work. For instance, they may experience fatigue as a side effect of treatment."

N9: "I believe cancer survivors may face both physical and psychological challenges upon returning to work. These challenges might impact their work efficiency and mood. It would be beneficial for them to go out more and relax."

### 3.3. Main Theme Three: Support System

*3.3.1. Subtheme One: Policy Support.* The study participants conveyed a consensus that there is a necessity for augmented policy support from the national and societal levels to facilitate the RTW of cancer survivors. Despite this belief, the participants observed a general shortfall in the provision of such support, with many cancer survivors either not receiving or receiving insufficient policy assistance.

N7: "During the treatment period, they hoped that society would help them return to work, but it didn't feel very smooth."

N13: "Provide them with more convenience within my ability, but the company does not have more policies to support me in doing more, such as providing them with specialized mental health support."

*3.3.2. Subtheme Two: Employer's Support.* The participants in the study have indicated that the support from employers is essential for cancer survivors who aim to RTW. Such support is considered a pivotal component in the RTW process, as it can significantly influence the survivors' ability to reintegrate into their professional roles effectively.

Employer support may manifest in various forms, including but not limited to: providing a flexible work schedule, offering reasonable accommodations, ensuring a healthy work environment, and maintaining open communication channels. This support is crucial as it can directly impact the survivors' physical and psychological well-being, as well as their overall work performance and job satisfaction.

N15: "If they lack the support of their employers, it will be difficult for them to return to their positions at work."

N10: "As a manager, I will do my best to help them readjust to their work. There is a lot of pressure in arranging their work, and I don't know how to balance their health and workload."

N19: "What I can do is not arrange for them to work night shifts and provide as much care as possible at work, but I don't think it's possible to take good care of some patients who arrive later."

A key issue emerges from the findings: while employers provide task modification (e.g., avoiding night shifts, N19), psychological support (e.g., mental health resources) continues to be neglected. This echoes Williamson et al.'s [17] observation that employer support is often pragmatic rather than holistic.

*3.3.3. Subtheme Three: Colleague and Family Support.* Participants have articulated that the provision of familial support is an essential precondition for the successful reintegration of cancer survivors into the workforce. Additionally, the cultivation of amicable and cooperative colleague interactions is posited to engender an enhanced occupational milieu, thereby facilitating a more seamless transition for cancer survivors as they navigate the complexities of returning to their professional roles.

N15: "As colleagues, we strive to provide her with support and understanding. We will proactively share her work tasks, allowing her more time to rest and take care of her family. At the same time, we will also encourage her to share her feelings and troubles, letting her know that we have always been by her side to support her."

N14: "I will do what I can within my ability to help them alleviate their stress."

N7: "As a family member, I will support them in returning to work. After returning to work, it is clear that their mood has improved."

*3.4. Main Theme Four: Returning to Family.* Participants advocate for an approach that prioritizes the allocation of increased time for cancer survivors to engage in familial interactions, thereby enhancing their quality of life. The emphasis is on the pursuit of joy and the maximization of life satisfaction, with the ultimate goal of ensuring that the survivors experience a state of enduring happiness throughout the remainder of their lives.

N2: "I don't think they need to go back to work anymore. They have to deal with physical discomfort and the side effects of treatment, while also working hard to complete work tasks and take care of their families. I think they should rely more on their families to enjoy life."

N4: "They have cancer, and although the burden on their families may be heavier, I think with the current good medical insurance policy, they should not work for money."

N17: "I think they should return to their families. Family members can take better care of them, including diet, daily life, and so on. Moreover, family encouragement is beneficial to their physical and mental health."

*3.5. Main Theme Five: Self-Realization*

*3.5.1. Subtheme One: Self-Reconstruction.* Participants have indicated that the resumption of employment among cancer survivors is instrumental in the reconstruction of their self-confidence and the reaffirmation of their capabilities and intrinsic worth. This return to the workforce is also associated with the reestablishment of the sense of achievement and gratification that they have previously derived from their professional endeavors. Consequently, this process of self-renewal is posited as a pivotal aspect of the psychosocial rehabilitation for individuals who have survived cancer.

N25: "The process of returning to work is challenging. They must readjust to the pace and demands of the job while managing physical discomfort. However, each time they complete a project or achieve a goal, the resulting sense of accomplishment and pride allows them to overlook the difficulties and pain."

*3.5.2. Subtheme Two: Physical and Mental Reintegration.* Participants have articulated that for cancer survivors, the act of reintegrating into the workforce signifies a return to the premorbid state of work and life. This journey transcends the mere recuperation of physical health; it encompasses the reconstruction of personal identity and the fulfillment of one's self-worth. The re-engagement in professional roles is thus a multifaceted process that is integral to the holistic recovery and the realization of an individual's potential.

N25: "There are cancer patients in my family. For them, work is not merely a source of income but a crucial means of realizing personal value and career aspirations. Returning to a familiar work environment and collaborating with colleagues can help them gradually regain confidence and satisfaction in life."

N10: "I believe they should return to their previous familiar work routine, as this will make them feel useful and boost their confidence in overcoming the illness."

### *3.6. Main Theme Six: Pressure From Colleagues and Leaders*

*3.6.1. Subtheme One: Interpersonal Communication Pressure.* Participants posit that cancer survivors may exhibit heightened psychological sensitivity or a tendency toward pessimism, which manifests as a circumspect approach in their daily communicative interactions. This cautiousness may stem from the existential and emotional challenges associated with the disease, influencing their interpersonal dynamics and psychological well-being.

N16: "I am straightforward and tend to speak a lot. I can be somewhat outspoken, and at times I worry that I might say something wrong and inadvertently hurt others."

*3.6.2. Subtheme Two: Psychological Burden.* Participants have conveyed that they frequently encounter an intangible sense of pressure when collaborating with cancer survivors. This perception may arise from the complexities of navigating the social and emotional dynamics that can accompany the presence of individuals who have undergone the transformative experience of cancer treatment and recovery. The subtleties of such interactions may impose an unspoken burden on colleagues, who may feel the need to balance empathy with the maintenance of professional standards, thus contributing to the felt pressure.

N22: "Working with them generates an intangible pressure, and I struggle to figure out how to interact with them."

N8: "I am an introvert, reserved and highly sensitive. When working with them, I often experience unexplained feelings of depression."

## 4. Discussion

According to the latest global epidemiological data, China reported an estimated 4.82 million new cancer cases in 2022, representing 24% of the global total. Notably, more than 40% of these cases occur in people aged 20–64 years, a population that is critical for labor force sustainability [21], and therefore necessary to RTW after treatment. This study examined public attitudes toward cancer survivors returning to work. The findings indicate that these attitudes are complex and multidimensional, encompassing aspects such as social cognition, workplace environment, legal frameworks, and social support. A detailed analysis of these factors is presented below.

Firstly, there is growing recognition that cancer is not a death sentence but a treatable condition. As a result, there is strong support and encouragement for cancer survivors who express a desire to RTW. Public sentiment is shifting toward fostering a culture of tolerance and understanding, motivating survivors to engage actively in society, including re-entering the workforce. Employers can implement humane management practices by offering flexibility and additional conveniences for BCS with RTW intentions and enhancing cooperation among stakeholders to facilitate the RTW of BCS [22].

Secondly, stigma and misunderstanding persist regarding cancer within society, contributing to prejudice against cancer survivors. Such biases include doubts about their work capabilities, excessive concerns about their health, and even outright rejection. These prejudices often stem from fear and a lack of understanding about cancer, coupled with the belief that it is an incurable terminal illness, which hinders the acceptance of cancer survivors. Despite many survivors being transparent about their medical histories upon returning to work, they frequently encounter rejection and disdain. This is particularly challenging for those unable to hide their conditions due to hair loss from treatments [23]. Once their conditions are known, they have reported unfair treatment [24], becoming subjects of workplace gossip, experiencing deterioration in personal relationships [25], and struggling to reintegrate into their work teams. Some have even been terminated because of their condition. Such experiences contribute to feelings of inferiority. This is similar to the "ability stigma" of chronic illness [26], where survivors are stereotyped as less competent due to health-related limitations.

Thirdly, research indicates that both workplace leaders and colleagues often exhibit overprotective behaviors toward cancer survivors. This tendency primarily stems from prevalent stereotypes that question the work capacity of these individuals. Future policies could include a structured mental health component (e.g., employer-funded therapy sessions) as part of RTW programs, a strategy that has been shown to be effective in reducing anxiety and depression in survivors [27].

At the same time, family overprotection can lead to self-doubt among survivors, undermining their perceived self-worth. A comprehensive German study, examining cancer survivors across 18 European nations, pinpointed factors influencing their RTW, which include aspects of the social system, treatment modalities, disease characteristics, health behaviors, psychosocial attributes, employment conditions, and sociodemographic elements. These findings enable interventionists to identify at-risk survivors and facilitate their reintegration into the workforce [9].

Finally, we should do the following to address the above issues. Enhance public science communication: Increase awareness and understanding of cancer among the general population through media and Internet channels. This effort aims to correct misconceptions and reduce prejudice related to cancer. Promote workplace inclusion: Advocate for an inclusive workplace culture and encourage employers to offer equal employment opportunities and appropriate

working conditions for cancer survivors. Concurrently, enhance the enforcement of pertinent laws and regulations to safeguard the employment rights and interests of cancer patients.

## 5. Limitations

This study has certain limitations. Firstly, the sample size of this study is small and the findings cannot fully represent the attitudes of all members of the public. Secondly, only the population in Jiangsu, China, was selected for this study, and the perspectives of the participants may not be representative of a broader population, which may lead to limitations in the generalizability of the findings.

The sample size will be expanded in future studies to cover more members of the public of different districts, ages, occupations, and cultural backgrounds so as to enhance the representativeness of the sample and the generalizability of the findings.

## 6. Conclusions

Public attitudes toward cancer survivors' RTW are complex and multidimensional, encompassing questions about work ability, reliance on family support, and survivors' need for self-actualization. Based on the social support theory and Chinese cultural specificities, it is hoped that in the future, antidiscrimination regulations and corporate incentives will be implemented at the policy level, employers will implement flexible RTW programs and psychological support, and healthcare professionals will work together with occupational therapists to assess the functional status and provide collaborative interventions in the family and the workplace, so as to gradually eliminate the prejudices and discriminations against cancer survivors, and to create a fairer and more inclusive employment environment for them.

## Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

## Ethics Statement

Informed consent was acquired from all study participants when conducting this study. The study was approved by the Affiliated Hospital of Nantong University (No. 2024-K068-01). In addition, to ensure the confidentiality of each participant, we anonymized the data for this study.

## Consent

Please see the Ethics Statement.

## Conflicts of Interest

The authors declare no conflicts of interest.

## Author Contributions

Jun Luo: conceptualization, methodology, software, investigation, formal analysis, and writing – original draft. Yu Qi Jiang: data curation, visualization, and investigation. Yue Shi: data curation, visualization, and investigation. Dan Chen: data curation, visualization, and investigation. Wen Qin: validation, visualization, and investigation. Qin Zhu: investigation. Yu Jie Guo: conceptualization, funding acquisition, resources, supervision, and writing – reviewing and editing.

## Funding

This work was supported by the National Social Science Fund of China (grant number 21BSH007).

## Acknowledgments

The authors would like to thank the participants for their time and interest in the project.

## References

[1] P. Butow, R. Laidsaar-Powell, S. Konings, C. Y. S. Lim, and B. Koczwara, "Return to Work After a Cancer Diagnosis: A Meta-Review of Reviews and a Meta-Synthesis of Recent Qualitative Studies," *Journal of Cancer Survivorship* 14, no. 2 (2020): 114–134, https://doi.org/10.1007/s11764-019-00828-z.

[2] Y. W. Guo, B. Fu, Y. X. Mei, B. L. Lin, and Z. X. Zhang, "Research Progress on Return-To-Work Assessment Tools," *Chinese Journal of Rehabilitation Theory and Practice* 24, no. 12 (2018): 1417–1421.

[3] K. Zomkowski, P. G. Wittkopf, B. Baungarten Hugen Back, A. Bergmann, M. Dias, and F. F. Sperandio, "Pain Characteristics and Quality of Life of Breast Cancer Survivors that Return and Do Not Return to Work: An Exploratory Cross-Sectional Study," *Disability & Rehabilitation* 43, no. 26 (2021): 3821–3826, https://doi.org/10.1080/09638288.2020.1759150.

[4] World Health Organization, *Latest Global Cancer Data: Cancer Burden Rises to 18.1 Million New Cases and 9.6 Million Cancer Deaths in 2018* (IARC, 2018).

[5] R. Sun, Y. H. Wang, F. Q. Dong, and R. S. Zheng, "Cancer Survivors' Quality of Life: Current Research Status," *Nurse Educator J* 33, no. 20 (2018): 1840–1845, https://doi.org/10.16821/j.cnki.hsjx.2018.20.006.

[6] X. Chen, M. Zhong, C. Chen, L. Huang, K. Zhang, and X. Wu, "Multivariable Prediction of Returning to Work Among Early-Onset Colorectal Cancer Survivors in China: A Two-Year Follow-Up," *Asia-Pacific Journal of Oncology Nursing* 12 (2025): 100637, https://doi.org/10.1016/j.apjon.2024.100637.

[7] M. A. Greidanus, A. G. E. M. de Boer, A. E. de Rijk, et al., "Perceived Employer-Related Barriers and Facilitators for Work Participation of Cancer Survivors: A Systematic Review of Employers' and Survivors' Perspectives," *Psycho-Oncology* 27, no. 3 (2018): 725–733, https://doi.org/10.1002/pon.4514.

[8] Z. Amir, P. Wynn, F. Chan, D. Strauser, S. Whitaker, and K. Luker, "Return to Work After Cancer in the UK: Attitudes and Experiences of Line Managers," *Journal of Occupational Rehabilitation* 20, no. 4 (2010): 435–442, https://doi.org/10.1007/s10926-009-9197-9.

[9] C. Tiedtke, A. de Rijk, B. Dierckx de Casterlé, M. R. Christiaens, and P. Donceel, "Experiences and Concerns About 'Returning to Work' for Women Breast Cancer Survivors: A Literature Review," *Psycho-Oncology* 19, no. 7 (2010): 677–683, https://doi.org/10.1002/pon.1633.

[10] C. M. Tiedtke, B. Dierckx de Casterlé, M. H. W. Frings-Dresen, et al., "Employers' Experience of Employees With Cancer: Trajectories of Complex Communication," *Journal of Cancer Survivorship* 11, no. 5 (2017): 562–577, https://doi.org/10.1007/s11764-017-0626-z.

[11] M. I. Fitch and I. Nicoll, "Returning to Work After Cancer: Survivors', Caregivers', and Employers' Perspectives," *Psycho-Oncology* 28, no. 4 (2019): 792–798, https://doi.org/10.1002/pon.5021.

[12] D. Gessler, I. Juraskova, U. M. Sansom-Daly, H. L. Shepherd, P. Patterson, and D. M. Muscat, "Clinician-Patient-FamilyDecision-Making and Health Literacy in Adolescents and Young Adults With Cancer and Their Families: A Systematic Review of Qualitative Studies," *Psycho-Oncology* 28, no. 7 (2019): 1408–1419, https://doi.org/10.1002/pon.5110.

[13] D. Yagil, H. Goldblatt, and M. Cohen, "Family Members' Experiences of the Return to Work of Cancer Survivors," *Health and Social Care in the Community* 30, no. 1 (2022): 184–192, https://doi.org/10.1111/hsc.13388.

[14] C. D. Samuel-Hodge, Z. Gizlice, J. Cai, P. J. Brantley, J. D. Ard, and L. P. Svetkey, "Family Functioning and Weight Loss in a Sample of African Americans and Whites," *Annals of Behavioral Medicine* 40, no. 3 (2010): 294–301, https://doi.org/10.1007/s12160-010-9219-z.

[15] M. B. Gilliam, A. Madan-Swain, K. Whelan, D. C. Tucker, W. Demark-Wahnefried, and D. C. Schwebel, "Cognitive Influences as Mediators of Family and Peer Support for Pediatric Cancer Survivors' Physical Activity," *Psycho-Oncology* 22, no. 6 (2013): 1361–1368, https://doi.org/10.1002/pon.3140.

[16] J. S. House, *Work Stress and Social Support* (Addison-Wesley, 1981).

[17] T. J. Williamson, A. K. Choi, J. C. Kim, et al., "A Longitudinal Investigation of Internalized Stigma, Constrained Disclosure, and Quality of Life Across 12 Weeks in Lung Cancer Patients on Active Oncologic Treatment," *Journal of Thoracic Oncology* 13, no. 9 (2018): 1284–1293, https://doi.org/10.1016/j.jtho.2018.06.018.

[18] P. Zhu, H. Zhang, W. Wang, et al., "The Challenges of Returning to Work for Differentiated Thyroid Cancer Survivors in China: A Qualitative Study," *Supportive Care in Cancer* 31, no. 10 (2023): 582, https://doi.org/10.1007/s00520-023-08049-y.

[19] R. Aggarwal and P. Ranganathan, "Study Designs: Part 2-Descriptive Studies," *Perspectives in Clinical Research* 10, no. 1 (2019): 34–36, https://doi.org/10.4103/picr.PICR_154_18.

[20] N. K. Denizen and Y. S. Lincoln, *The SAGE Handbook of Qualitative Research* (Thousand Oaks, CA: SAGE Publications, 2024).

[21] X. Diao, C. Guo, Y. Jin, et al., "Cancer Situation in China: An Analysis Based on the Global Epidemiological Data Released in 2024," *Cancer Communications* 45, no. 2 (2025): 178–197, https://doi.org/10.1002/cac2.12627.

[22] K. Bilodeau, M. M. Gouin, A. Fadhlaoui, and B. Porro, "Supporting the Return to Work of Breast Cancer Survivors: Perspectives From Canadian Employer Representatives," *Journal of Cancer Survivorship* 18, no. 4 (2024): 1384–1392, https://doi.org/10.1007/s11764-023-01382-5.

[23] M. Nilsson, M. Olsson, A. Wennman-Larsen, L. M. Petersson, and K. Alexanderson, "Return to Work After Breast Cancer: Women's Experiences of Encounters With Different Stakeholders," *European Journal of Oncology Nursing* 15, no. 3 (2011): 267–274, https://doi.org/10.1016/j.ejon.2011.03.005.

[24] C. S. Dewa, L. Trojanowski, S. J. Tamminga, J. Ringash, M. McQuestion, and J. S. Hoch, "Work-Related Experiences of Head and Neck Cancer Survivors: An Exploratory and Descriptive Qualitative Study," *Disability & Rehabilitation* 40, no. 11 (2018): 1252–1258, https://doi.org/10.1080/09638288.2017.1291764.

[25] P. E. A. van Maarschalkerweerd, M. Schaapveld, C. H. Paalman, N. K. Aaronson, and S. F. A. Duijts, "Changes in Employment Status, Barriers to, and Facilitators of (Return to) Work in Breast Cancer Survivors 5-10 Years After Diagnosis," *Disability & Rehabilitation* 42, no. 21 (2020): 3052–3058, https://doi.org/10.1080/09638288.2019.1583779.

[26] A. K. McGonagle and J. L. Barnes-Farrell, "Chronic Illness in the Workplace: Stigma, Identity Threat and Strain," *Stress and Health* 30, no. 4 (2014): 310–321, https://doi.org/10.1002/smi.2518.

[27] P. G. Poudel, M. R. Horan, T. M. Brinkman, et al., "Interventions With Social Integration Components Addressing Psychosocial Outcomes of Young- and Middle-Aged Adult Cancer Individuals: A Systematic Review," *Cancers (Basel)* 15, no. 19 (2023): 4710, https://doi.org/10.3390/cancers15194710.