

## Systematic Literature Review of Qualitative Research on Stress Resilience Among Breast Cancer Survivors

### *Sorotan Literatur Bersistematik Mengenai Penyelidikan Kualitatif Berkaitan Daya Tahan dalam Kalangan Pemandiri Kanser Payudara*

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#### ABSTRACT

*Breast cancer is the most frequently diagnosed cancer among women, accounting for a quarter of all cancer cases in women. Many studies have demonstrated that increasing resilience benefits cancer control and adaptation. However, current theories of resilience among breast cancer survivors are lacking in terms of comprehensive insights into resilience. Qualitative research data is more helpful in exploring the rich connotation of resilience. Hence, this research is a systematic review of findings from 13 previous qualitative studies on resilience among breast cancer survivors. The findings are categorized into four key themes: (1) the initial stage of resilience is fraught with risks, which include body image distress, illness misperceptions, and emotional distress; (2) resilience emerges through the interaction between the environment and the individual. The impact of individuals is mainly reflected in personal resilience traits, while the environment level is mainly reflected in the family, social, cultural and religious influences; (3) the main coping styles employed by breast cancer survivors include problem-focused coping, emotion-focused coping, and pointless response; (4) the outcomes of resilience include self-awareness and meaning-making, empowerment, transcend oneself and help others. The study concludes that resilience involves a continuous interplay between protective and risk factors, influenced by both individual attributes and environmental conditions. Each encounter with stress or adversity reshapes resilience, leading to a new and dynamic equilibrium. Medical professionals and social workers should address the social and psychological challenges faced by survivors, offering tailored support to foster resilience development.*

*Keywords: breast cancer survivors; resilience; stress coping; qualitative research; systematic review.*

#### ABSTRAK

*Kanser payudara adalah kanser yang paling kerap didiagnosis dalam kalangan wanita, merangkumi satu perempat daripada semua kes kanser dalam kalangan wanita. Banyak kajian telah membuktikan bahawa meningkatkan daya tahan adalah bermanfaat untuk mengawal kanser dan adaptasi pemandiri kanser. Walau bagaimanapun, teori semasa mengenai daya tahan dalam kalangan pemandiri kanser payudara adalah kurangnya pemahaman yang menyeluruh tentang daya tahan. Oleh itu, kajian ini merupakan sebuah kajian sistematik mengenai dapatan daripada 13 kajian kualitatif terdahulu berkaitan daya tahan dalam kalangan pemandiri kanser payudara. Penemuan ini dikategorikan kepada empat tema utama: (1) peringkat awal daya tahan yang berisiko, termasuk tekanan imej badan, salah tanggapan penyakit, dan tekanan emosi; (2) daya tahan adalah proses interaksi antara persekitaran dan individu. Kesan terhadap individu terutamanya ditunjukkan dalam sifat daya tahan peribadi, manakala peringkat persekitaran terutamanya ditunjukkan dalam pengaruh keluarga, sosial, budaya dan agama; (3) jenis daya tindak yang digunakan oleh pemandiri kanser payudara termasuk daya tindak fokus masalah, daya tindak fokus emosi, dan tindak balas yang tidak berfaedah; (4) hasil daya tahan termasuk kesedaran diri dan pembentukan makna, pemerkasaan, melampaui diri sendiri dan membantu orang lain. Kajian ini menyimpulkan bahawa daya tahan melibatkan interaksi berterusan antara faktor perlindungan dan risiko, yang dipengaruhi oleh sifat individu dan keadaan persekitaran. Setiap pertemuan dengan tekanan atau kesukaran membentuk semula daya tahan, membawa kepada keseimbangan baru yang dinamik. Profesional perubatan dan pekerja sosial harus menangani cabaran sosial dan psikologi yang dihadapi oleh pemandiri, menawarkan sokongan yang disesuaikan untuk memupuk pembangunan daya tahan.*

*Kata kunci: pemandiri kanser payudara; daya tahan; penanganan tekanan; penyelidikan kualitatif; sorotan kajian bersistematik.*

## INTRODUCTION

According to the International Agency for Research on Cancer's (IARC) statistics in Globocan, breast cancer (BC) is the most frequently diagnosed cancer among women, accounting for a quarter of all cancer cases in women (World Health Organization 2021). A survivor's diagnosis of BC is a crucial crisis. BC survivors must also deal with the risk of death and the worry of recurrence in addition to the potential breast deformities that might arise after BC surgery, the variety of pain, and even complications linked to chemotherapy and radiotherapy (Edward et al. 2019). Additionally, there has been an increase in interest in psychosocial factors, initially focused on the adverse effects of BC, including negative emotions, physical discomfort, body image disturbances, and interpersonal disorders (Taylor et al. 1991). As resilience became increasingly popular in the 1970s (Richardson 2002), scholars shifted from a problematic to a strengths-based perspective. Some studies suggested that BC survivors gained resilience from their experience of the illness, giving them hope and confidence to overcome it (Chen et al. 2021; Shi et al. 2021). When BC survivors become ill, their personal identity changes. Successfully overcoming physical and mental obstacles and gradually accepting themselves requires a combination of their own resilience and external support (Seiler & Jenewein 2019). However, the resilience that may have been finally improved may randomly collapse when faced with relapse, metastasis, or other major problems (Veličković et al. 2022 & Molenaar et al. 2023). Maintaining a stable and high level of resilience can help survivors survive better and improve their quality of life (Pardeller et al. 2020 ; Macía et al. 2020).

There are currently three mainstream views on defining the concept of resilience: trait theory (Tao Huanhuan 2009), outcome theory (Imperio 1999), and process theory (Seifer & Sameroff 1987). Among them, the five most representative scholars, Garnezy (1984), Hunter (1999), Rutter (1987), Kumpfer (1999), and Richardson (2002), respectively proposed five resilience models, which jointly promoted the development of resilience theory and gradually applied to various groups of people. Current research on the resilience of BC survivors mainly includes phenomenon research (Dyer 2022 & Chiaranai et al. 2022), factor research (Michalczyk et al. 2022; Zhai, J. et al. 2019; Hu, R. Y. et al. 2021), and intervention research (Wang Pengbo et al. 2021; Ye, Z. J. et al. 2021). However, no authoritative theoretical model has been sorted out for the overall connotation of resilience.

Qualitative research is good at exploring specific special phenomena to discover problems and propose new perspectives (Merriam & Grenier 2019). However, qualitative research faces different research objects and situations and uses different methodologies, with different conclusions drawn. Therefore, this study systematically integrates previous qualitative research results to explore the connotation of resilience in BC survivors, guiding practice and providing a theoretical basis for improving their resilience.

## MATERIALS AND METHODS

This study uses a systematic literature review (SLR), which reduces bias in study selection and inclusion by seeking to include all published evidence on the topic and assessing the quality of this evidence, SLR minimizes the risk of bias, increases transparency at each stage of the review process and research, and objectively summarizes them (Mengist et al. 2020 ). The study utilizes the standardized process using JBI (Lockwood et al. 2020) as a guide for the systematic review.

## SEARCH STRATEGY

This study searches Pub Med, Scopus, Web of Science, CNKI, and Wanfang by computer, to collect qualitative research on the resilience of BC survivors. Among them, CNKI and Wanfang are the two most commonly used databases in China. The study was limited to a 15-year period (2010–2024) in order to provide the most relevant and up-to-date knowledge. Using the combination of subject words and free words, search keywords in English: ‘BC/ breast neoplasm\*/ breast tumor/ breast carcinoma,’ ‘qualitative research/ qualitative study/ phenomenology/ grounded theory,’ ‘resilience/ resilience/ resistibility/ mental toughness/ positive emotional experience/ post-traumatic growth’. Chinese search keywords: ‘乳腺癌/乳腺肿瘤/乳癌’, ‘质性研究/定性研究/访谈/现象学/扎根理论’ ‘抗逆力/复原力/心理弹性/心理韧性/创伤后成长/积极心理’ (The above Chinese are synonymous translations in English).

## LITERATURE INCLUSION AND EXCLUSION CRITERIA

The selection criteria were developed to capture all studies of interest and were as broad as possible to avoid any selection bias (Koutsogeorgou et al. 2020). To understand the connotation of resilience among BC survivors from diverse information, qualitative research papers were selected. Conference proceedings and studies for which abstracts, or full texts were not available were excluded.

*Inclusion criteria:* i. Qualitative research published in a peer-reviewed scientific journal. ii. English and Chinese publications. iii. Published between January 2010 and January 2024. iv. The research subjects are BC survivors (over 18 years old) who had moved beyond the risk stage. v. The research phenomenon describes the content related to the resilience of BC survivors.

*Exclusion criteria:* i. Only abstracts are available, but the full text cannot be obtained; ii. Duplicate publications or documents with incomplete data; iii. Documents published in languages other than Chinese and English. iv. Books or book reviews, conference proceedings, Theses/Dissertations, v. Other non-peer-reviewed sources.

## LITERATURE SCREENING AND DATA EXTRACTION

The researchers screened the literature and extracted the data, and the experts assist during the decision-making and review processes. When filtering the literature, the researchers first read the titles. After excluding the irrelevant literature, the researchers examined each selected article’s abstract and full text to determine whether to include or exclude it. Then, the next step is to evaluate the quality of the included literature. According to the ten evaluation criteria using the JBI SUMARI qualitative research authenticity evaluation tool (Lockwood et al. 2020), the researchers marked each item as ‘Yes, No, Unclear, Not Applicable.’ The quality grade of documents that meet all of the evaluation criteria is grade A, those that partially meet the requirements are grade B, and articles that do not meet all the standards are grade C and excluded from the grade C documents.

## DATA ANALYSIS METHODS

This study integrates the results into an integrative/ aggregative synthesis (Cooper et al. 2019). Collective integration collects research results such as themes, hidden meanings, and

classifications and further integrates and summarizes them according to their meanings to make them more pertinent, persuasive, and general. To understand the philosophical thought and methodology of heterogeneous research, researchers repeatedly read to comprehend, analyze, and explain the meaning of each research result, group similar results together to form new categories, and then summarize the categories into integrated results (Brødsgaard et al. 2019).

## RESULTS

### LITERATURE SEARCH RESULTS

The authors retrieved a total of 169 articles on related topics in the past fifteen years from different platforms. In the first step, duplicate articles and articles with only abstracts but no full text were removed. Then, through manual review, the titles and abstracts were read to determine relevance, and 62 articles were removed according to the inclusion and exclusion criteria. Finally, full-text screening was performed, and the remaining 101 articles were evaluated for eligibility. Only articles with qualitative research as the research type, female BC survivors as the research subjects, the resilience of BC survivors and influencing factors as the research phenomenon, and the research scenario as survivors who were out of danger, and the literature quality level was 'B' or above were retained. A total of 13 articles were included, including nine phenomenological studies and four grounded theory studies. The literature screening process and results are shown in Figure 1.

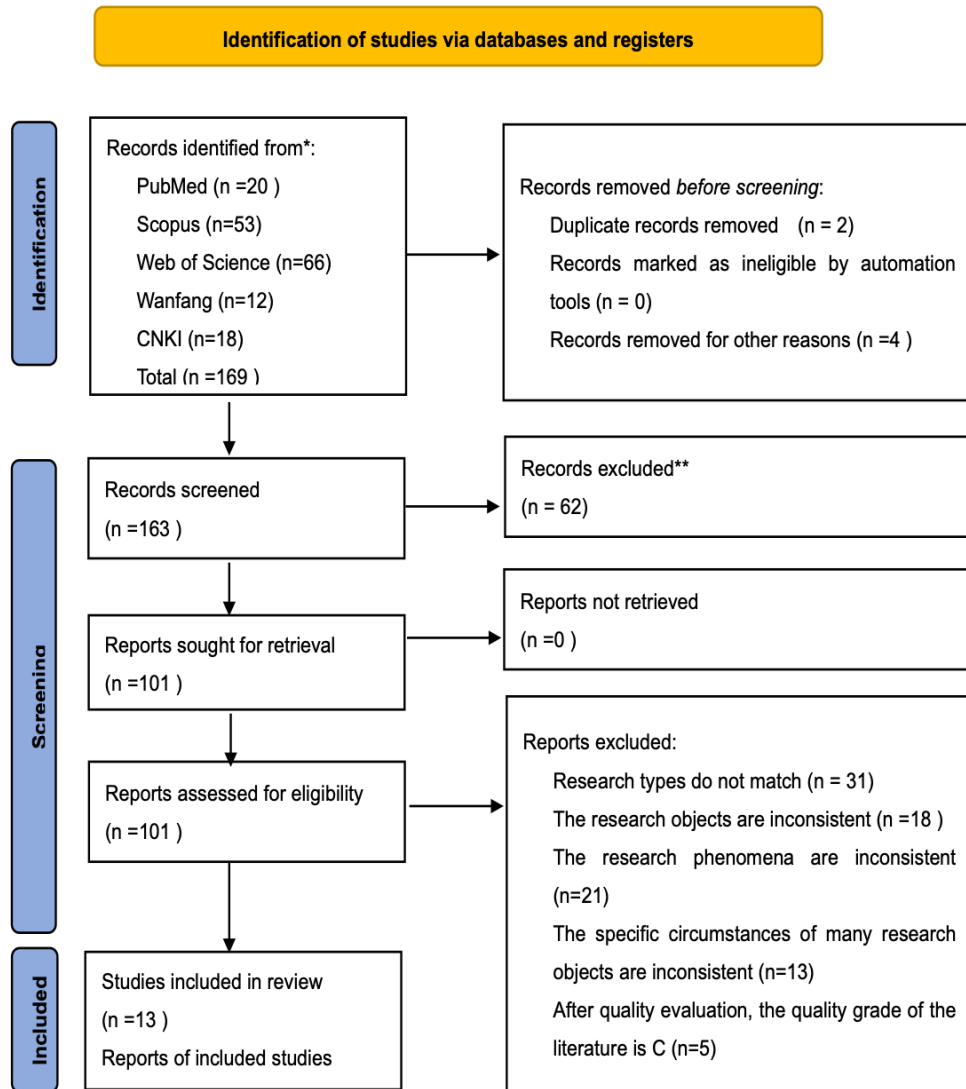


FIGURE 1. PRISMA 2020 flow diagram

## BASIC CHARACTERISTICS AND QUALITY EVALUATION OF INCLUDED LITERATURE

The primary characteristics of the included literature are shown in Table 1, and the methodological quality evaluation results are shown in Table 2.

TABLE 1. Basic characteristics of the included literature

Included studies	Year of publication	Research methods	Research object	Sample size	Research Topics	Theme
Pieters	2016	Grounded theory	Elderly BC survivors	18	The development process and characteristics of resilience	3 themes: Rebound is a defining feature of resilience; Resilience is a multidimensional process involving the intersection of natural attributes; Self-reliance, optimism, and perseverance are rooted in people's interconnected

Lillie et al.	2017	Phenomenological research study	BC survivors	27	The influence of couples' communication patterns and strategies on resisting adversity	3 themes: How the process of legitimizing negative emotions while highlighting productive action can help communicate tension management; How affirming a shared identity in communication can help couples build normalcy and develop resilience; Help couples discuss complex topics.
Rashidi et al.	2021	Constructivism & Phenomenology Research study	Australian BC survivors	11	Experiences and self-awareness of BC survivors	3 themes: The diseased self, focuses on presenting emotional distress and appearance; The coping self, explores resilience and post-traumatic growth; The transformed self, engages in self-image, meaning-making, and displays of psychological ownership to address survivors and empowerment issues.
Zhai et al.	2020	Constructivism & Grounded Theory	Chinese BC survivors	24	The development process of resilience in Chinese BC survivors, and the construction of a Chinese post-traumatic growth model	3 themes: The main cognitive and emotional processes of adapting to life with illness; The core processes are influenced by multiple contextual factors, including personal factors, social environmental factors, and some specific cultural factors that emphasize positive change; 'doing nothing' coping strategies, Chinese cultural values contribute to their adjustment process and post-traumatic upbringing.
Sherman et al.	2012	Grounded theory	American BC survivors	15	Building a substantive theory of the developmental process of BC resilience	4 themes: BC diagnosis and treatment is a turning point in life and a driving force for change; BC is a part of life; learning to live with BC; Starting a new life after BC
Hefferon et al.	2011	Phenomenological research study	BC survivors	10	Exploring participation in physiological activities resilience characteristics of BC survivors after intervention	4 themes: Changing out of a cocoon and becoming a butterfly; Body monitoring; Learning new skills; Improving health awareness/behavior
Leung et al.	2010	Constructivism & Phenomenology Research study	China Hong Kong BC survivors	26	Exploring the positive psychological experience of BC survivors under the background of oriental spiritual culture	4 themes: Experience spiritual impact; meaning construction; establish connection; achieve transcendence
Ching et al.	2012	Grounded theory	China Hong Kong BC survivors	24	Explore women with BC resilient process	4 Themes: Coping with Struggle; Coping with the Flow; Coping with Struggling; Coping with Suffering
Mehrabi et al.	2015	Phenomenological research study	Iranian BC survivors	18	Female BC Resilience characteristics	4 themes: Appreciate life; Enhance the stability of life; Spiritual prosperity; Effective interaction
Shen Aomei et al.	2016	Phenomenological research study	Chinese BC survivors	14	Understanding convalescent BC survivor resilience	4 themes: Health-related behavior modification Goodness, enhanced health awareness and improved health behavior; Spiritual development, understanding the meaning of life and forming a new philosophy of life; Improvement of

Wu Zijing et al.	2016	Phenomenological research study	Chinese BC survivors	16	Protective factors of psychological resilience in BC survivors	interpersonal relationships; Active planning for future life 6 themes: Personal competence; Illness attribution; Social support; Social comparison; Meaning of life; Coping style, etc.
Zhang, T et al.	2018	Phenomenology Research study	Chinese BC survivors	15	To investigate resilience factors that helped Chinese BC patients adapt to the trauma in the traditional Chinese cultural context.	6 themes: Hope for rehabilitation; Hardiness; Confidence in situation; Optimistic attitude to the disease; Gratitude to supporters; Mastery of life
Walton & Lee	2023	Phenomenology Research study	Indian BC survivors	14	Exploring protective resilience factors and barriers to resilience.	2 themes: The theme categories identified under protective resilience factors are personal, social, spiritual, physical, economic, and psychological factors; Identified barriers to resilience include lack of awareness, medical/biological barriers, social, economic and psychological barriers.

TABLE 2. Methodological quality evaluation of included studies

included studies	i	ii	iii	iv	v	vi	vii	viii	ix	x	quality level
Pieters (2016)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	A
Lillie et al. (2017)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	B
Rashidi et al. (2021)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	B
Zhai et al. (2020)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	B
Sherman et al. (2012)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	A
Hefferon et al. (2011)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	B
Leung et al. (2010)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	B
Ching et al. (2012)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	B
Mehrabadi et al. (2015)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	B
Shen Aomei et al. (2016)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	B
Wu Zijing et al. (2016)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	B
Zhang, T et al. (2018)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	B
Walton & Lee (2023)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	B

Note: i. Alignment of Philosophical Basis and Methodology. ii. Consistency of Methodology with Research Questions/Objectives.iii. Compatibility of Methodology with Data Collection. iv. Methodology Suitability for Research Object and Data Analysis. v.Methodological Approach. vi. Cultural Background and Values Perspective. vii. Researcher's Influence and Reciprocal Impact. viii. Typicality of Research Object and Representation. ix. Ethical Adherence. x. Basis for Conclusions

## META INTEGRATION RESULTS

By repeatedly reading, comparing, and interpreting the 13 included documents, the researchers extract 41 research results, combine similar results to form 14 new categories, and then synthesize them to obtain four integrated results. The result categories are not mutually exclusive.



TABLE 3. The themes that emerged based on the main findings of selected studies

Crises in the initial stage of resilience	Body Image Distress Illness misperceptions Emotional distress
Resilience is the process of interaction between the environment and the individual.	Personal resilience traits Family influence on individuals Social support influences on individuals Cultural and Religious influences on individuals
Main coping styles of BC survivors	Problem-focused coping Emotion-focused coping Pointless response
Resilience Outcomes	Awakening of self-awareness and meaning-making Empowerment Transcend oneself and help others

#### CRISES IN THE INITIAL STAGE OF RESILIENCE

**Body Image Distress.** BC survivors will sometimes lose one or both breasts and experience hair loss and weight gain during chemotherapy. For women, this effect on their appearance and femininity can lead to significant changes in their perceptions of self-image and relationships, manifested as a sense of shame and lack of confidence. A BC survivor said, ‘I was proud and happy about my breasts... I feel inferior to women (Hefferon, et al. 2010)’.

**Illness misperception.** After a BC diagnosis, people often think about why they got cancer. A BC survivor mentioned, ‘I’ve never done anything wrong. Why was the cancer in me? (Leung et al. 2010)’. Their core belief is that good people are rewarded, and when it is hard to understand why, it is a big mental shock.

**Emotional distress.** BC survivors are shocked when they are first diagnosed. A BC survivor said, ‘The diagnosis? I was sitting there completely stunned, not even thinking about anything (Rashidi et al. 2021)’. They have feelings of anxiety, A BC survivor said, ‘There was an extreme level of anxiety. It was very awful (Rashidi et al. 2021)’, the feeling of fear, like a BC survivor mentioned, ‘The worst thing was having to wait from the time of the test to find out the results since it was so uncertain (Rashidi et al. 2021)’, feeling out of control. etc., which may lead to suicide.

#### RESILIENCE IS A PROCESS OF INTERACTION BETWEEN THE ENVIRONMENT AND THE INDIVIDUAL

**Personal resilience traits.** Individuals inherently possess resilience traits such as self-reliance, whereby the decision-making about cancer treatment is in their hands, with family members acting as advocates, as a BC survivor said, ‘We discussed it together, but I was aware of my feelings. It was up to me to decide. He was supporting me, and it was my body (Pieters 2016)’. Optimistic people are better at dealing with cancer diagnosis and treatment and good at discovering meaningful activities. Self-reliance can increase personal happiness and satisfaction. A BC survivor mentioned, ‘I thought about how difficult it is for Tang Seng to learn Buddhist scriptures. I have overcome this difficulty, and if I survive a catastrophe, there will be future blessings (Wu Zijing et al. 2018)’. Humor is another dimension of positivity, defined as the capacity to highlight the positive aspects of adversity (Martin 2019). Strong perseverance can help survivors persist in treatment and enhance their ability to withstand difficulties, as a BC survivor said, ‘I’m sorry that I cannot take care of my family. I must be strong (Zhang, T et al. 2018)’; having hobbies can make



people feel happy when they focus on one thing and forget their pain and troubles. As a BC survivor said, 'I enjoy playing poker, and when I go, I forget about the radiation (Pieters 2016)'. *Family influence on individuals.* Significant others in the family are important to those with BC, especially after treatment for the illness. The sudden intrusion of BC into life has substantially impacted individuals and families. Some families cannot adapt, and the couples or families fall apart, which may cause harms to BC survivors. Some families struggle to adjust to the new normal. Changing couples' activities and maintaining good communication during normal life at home benefits BC survivors and their families, A BC survivor recounted that 'reduced social activities, but he and I still went out. We would travel, and those were like an hour, hour-and-a-half trips (Lillie et al. 2018)'. Some family members, especially the husband or partner, act as selfless supporters, which can significantly help survivors. A BC survivor illustrated the help she received and how it made her feel 'with him I was able to, I could let down my guard let my guard down him as he could see the true nature of the situation (Lillie et al. 2018)'. In addition, it is essential to maintain positivity in the family, but one cannot avoid negative feelings thoughtlessly. When a BC survivor expresses negative emotions, family members sometimes are unable to pay attention what they are feeling and provide the required comfort. If the family fails to address these emotions adequately, it will cause all the family members to suffer. In these case, poor communication is often an issue. A BC survivor recounted that 'She found it challenging to rely on her spouse as a communication partner because of how the pair handled this issue. Ellen sought solace from her friends (Lillie et al. 2018)'.

***Social support influences on individuals.*** Healthcare providers help BC survivors reduce fear of the illness, increase a sense of control over the future, provide security, and enhance individual psychological ownership. A BC survivor mentioned, 'I know I can, and I will overcome this! That was the primary concern (Rashidi et al. 2021)'. This mindset highlights the role of healthcare providers in helping BC survivors exercise their minds and reduce their anxieties and fears. The social support system also includes social networks, close partners, friends, and peer groups formed by other BC survivors. These peer groups are especially essential, providing mutual encouragement among cancer survivors. Shared experiences are very supportive for individuals. It may be encouraging to hear statements like 'The survivor Li, who has been ill for seven or eight years and is in the late stage, is living quite well now.'

***Cultural and Religious influences on individuals.*** Women often take on more family care responsibilities. Taking on responsibilities such as caring for children, supporting elderly family members and their accompanying partners, and reducing the burden of significant others is a vital force that enables most women to adapt to illnesses and help them be strong. Some women do not just live for themselves. As a BC survivor said:

My son is still young, he hasn't settled down with a career or been married. I must, nevertheless, take responsibility for my parents. This way of thinking helped me get through the difficult times.

(Zhai et al.2020)

Perseverance in the face of adversity is a precious virtue. Some women can sustain themselves through self-empowering courage, evaluation of progress and secondary gains, and transition after completing treatment with a meek attitude and evaluation of the good things in life (Ching et al. 2012). Religion may also help people rationally come to terms with illness. BC survivors with religious beliefs maintain hope for the outcome of cancer through prayer. Faith is

power. As a BC survivors said, ‘Lord give me the grace to journey with it (cancer) and the strength to bear it (Walton & Lee 2023)’. When the condition improves or restructures life, the surprise and gratitude further enrich people's spiritual world, as BC survivors said, ‘When I look up to the sky, I give God a great deal of thanks for my redemption and regeneration (Lillie et al. 2018)’. Some BC survivors began to believe in religion and God’s will and found physical and mental liberation and joy after getting sick.

#### MAIN COPING STYLES OF BC SURVIVORS

***Problem-focused coping.*** Problem-focused coping refers to active reframing and active reappraisal of behavior to contain and resolve crises (Mehrabian et al. 2015). Some survivors actively cooperate with treatment and will constantly adjust their mentality. A BC survivor gave an example of this coping style, ‘Only after the procedure will I think about the additional issues. I won’t be bothered then, and I’ll feel more at ease taking things step by step (Ching et al. 2012)’.

***Emotion-focused coping.*** Emotion-focused coping refers to responding to a crisis by adopting distancing, avoiding, and actively receiving compliments (Lazarus et al. 1984). For the identification and association of pro-social people, BC survivors experience support and love from others in their daily interactions with others. At the same time, they may also experience some negative stigma or a sense of abandonment. With positive support, BC survivors expressed their appreciation for the relationship; with negative support, they chose to ‘give up unhealthy partnerships, such as splitting up or divorcing their spouses or partners (Sherman et al. 2012)’. To reduce the worries of family members or the comments of people around them, some survivors may sometimes adopt avoidance strategies and conceal their illness, as a survivor said, ‘I have never told my parents, and my mother still doesn’t know. Because she is more than 80 years old, she can’t help me but only increases her pain (Wu Zijiang et al. 2018)’.

***Pointless Coping.*** Pointless coping means that it is difficult to get out of the haze of BC and cannot effectively overcome the predicament. Some people cannot accept having cancer and become overwhelmed and suffer extreme irritability when faced with problems. As a survivor mentioned, ‘I had fear, I heard one will die if it is cancer (Walton & Lee 2023)’. These people have a strong sense of powerlessness and helplessness in the face of difficult situations and need to rely entirely on the advice of others. As a survivor said, ‘The doctor phoned me. I was in shock and had no time to think. I didn’t know how to deal with cancer. I had no option but to heed his advice (Ching et al. 2012)’. These individuals are often so absorbed in being someone with BC that they cannot return to a ‘normal life’ and have significant concerns about recurrence or metastasis even after recovering from surgery. As a survivor said, ‘I’m anxious because it’s akin to a ticking bomb... We will be claimed by an uncontrollable illness (Ching et al. 2012)’.

#### RESILIENCE OUTCOMES

***Awakening of self-awareness and meaning-making.*** Coping with cancer is also a process of dealing with oneself and finding meaning. Meaning construction promotes rational acceptance of the diagnosis and active recovery. Over time, creating positive meaning creation can lead to self-growth, more vital insight, and crucial self-reflection. Consequently, this thought process and may eventually lead to an epiphany of wanting to achieve the highest state of resilience-self-reconstruction. (Speer et al. 2021).

Beyond cancer the awakened individual begins to think about a broader range of lifestyles, self-existence values, etc. A BC survivor explained this awakening, 'It's about changing your life, not simply about getting rid of the lump. Even if the tumor is removed, you won't recover if you don't make any lifestyle changes (Leung et al. 2010)'. Some BC survivors realize the fragility of life and rethink the meaning of life after experiencing a life-and-death crisis. As a survivor said:

I discovered how to value not just my health but also my friends, family, and spouse... I now consider their feelings... I am not as self-centered. This gives the experience a new significance.

(Leung et al. 2010)

Before getting sick, some women often take on more family responsibilities and follow the social norms for women, frequently ignoring their own needs and wants. After regaining their lives, many women chose not to be traditional 'good girls' in the general sense but to live for themselves. They break old life patterns and create new ones. For example, they were given 'permission to be me' as a BC survivor said. In the same vein, other survivors mentioned 'a new acknowledgment of my own needs with less self-sacrificing', 'a feeling of reasserting oneself and feeling less restricted,' and 'feeling less self-conscious with less care of what others think.' (Sherman et al. 2012). Some people have only work or constant content in their lives, and they start to look for new pursuits after surviving cancer. They described the cancer experience as a transformative journey that generated a 'positive life force' or 'a miraculous path leading to personal growth.'

**Empowerment.** When a BC survivor successfully overcomes a complex problem, the individual gains self-confidence and is proud of the experience, A BC survivor expressed these new changes, 'I became more outspoken. The new me is more confident. I advocate for myself and understand myself better. I started approaching problems from a different perspective (Rashidi et al. 2021)'. Survivors become stronger and braver, and their experience provides strength for overcoming greater difficulties in the future. Along the same lines, another survivor added, 'Like I've experienced so much in my life, I just keep getting back up. I can conquer any obstacle (Rashidi et al. 2021)'. There is also a shift in behavior where the BC survivor becomes more tolerant, with a heightened forbearance for challenges, with one survivor highlighting that 'After dealing with the illness, I believe my tolerance has grown. I believe I can handle anything that comes my way (Mehrabi et al. 2015)'.

**Transcend oneself and help others.** In the process of self-repair and progress, many BC survivors have gained a new perspective. BC is no longer a pain, but a gift from God. Some survivors of BC declared that 'When I am stronger, I am more willing to share my experience with others. I will not hide my BC experience, and even show my new breasts, impart medical experience, and help more BC survivors get out of the haze. (Lillie et al. 2018)'.

## DISCUSSION

Based on the above analysis, this study showed the resilience development process from the survivor's gradual recovery process. The starting point of the resilience process is the emergence of stressors or crisis events. This stimulating event breaks the individual's original balance. In the early stages of illness, risk factors can be highly devastating for individuals and families. It is

difficult for BC survivors to accept all the changes in their bodies at once. A wrong illness attribution and emotional distress bring them a lot of additional pain (Lillie et al. 2018; Vivien et al. 2013). During this time, families also share the risks. Family provides survivors with comprehensive financial and material support, care, spiritual, emotional, and other support. Families provide the key support when individuals temporarily lose their ability to care for themselves (Feng et al. 2024). In the hospital, BC survivors are more supportive and comforting, exchanging BC knowledge with each other and providing a lot of psychological support to fellow survivors. There is also the help and support from doctors and nurses, colleagues and leaders in the workplace, relatives and friends in the extended family, etc (Park et al. 2018). Many studies have suggested that the effect of working together to fight cancer far exceeds the energy of one individual (Ramos et al. 2018; Jeong et al. 2016). In addition, the ideologies in the environment have a subtle impact on survivors (Raghavan & Sandanapitchai 2019). Women are more likely to be the caregivers of the family as they often believe that the family cannot do without them (MA et al. 2014). The motivation to fight cancer is more for their families than for themselves. Religious beliefs fill people's spiritual world, which can bring about the cleansing of the soul beyond the physical body and are conducive to strengthening people's faith, thus improving resilience (Salleh et al. 2022). In addition, there are the Chinese people's views on health, various treatment options combining traditional Chinese and Western medicine, etc (Vivien & Noor 2012; Noor 2015).

Under the interference of unstable factors, individuals need to activate more resilience traits to cope with the imbalanced state and help them restore balance. Resilience traits include four aspects: independence, optimism, humor, and perseverance, which mean that the individual has a high sense of self-efficacy and control, a sense of connection with others, and the ability to manage emotions. Resilience traits help survivors choose more positive coping methods when dealing with problems. Many survivors experience changes in the way they cope after experiencing a serious illness. What used to be meaningless coping may lead to avoidance, self-punishment, and ineffective emotional venting. Later, they gradually change their mindsets and give more meaning to people and things. They master the ability to control their emotions, learn ways to solve problems, are adept at finding new ways of doing things, and contemplate more about their lives (Shukri & Badayai 2020).

When individuals stand up again after experiencing setbacks and can face future challenges with a better attitude, they have achieved the reconstruction of resilience and gained growth in physical, psychological, and social aspects. Some researchers believe that resilience outcomes cannot be directly quantified (Seiler & Jenewein 2019). Richardson proposed that resilience arises when an individual can adapt to their life situation, a state of "biopsychospirtual homeostasis", regardless of whether the current environment is good or bad (Tian et al. 2011). This study argues that resilience arises with the emergence of risk factors, that the quality of individual adaptation is not fixed, and that the state of adaptation is constantly adjusting. Suppose some people simply adapt to the pain without truly accepting the sick self and are eager to return to life before the disease, without deeply reflecting on themselves and trying to change the environment. In that case, they belong to the level of resilience and adaptation. If some people have persistent dissatisfaction with life and irreparable trauma, and even lead to the recurrence and transfer of emotional problems, it is the result of maladaptive resilience.

Academics and practitioners have not yet reached a consensus on how to measure resilience. So far, research on resilience has not formed a comprehensive theory (Tudor & Spray 2017). In addition, there is currently no targeted measurement tool for the psychological resilience of cancer patients such as BC (Resilience Measurement Technical Working Group 2014). Scholars often use

Connor-Davidson Resilience Scale (CD-RISC) instead, and its effectiveness remains to be verified. However, research on the resilience of BC survivors is still mainly quantitative research. This study hopes to focus on qualitative research, which occupies a small part of previous research. This study believes that subjective state plays a major role in resilience, such as the perception of risk, the choice of coping methods, and the overall expectation of future status, which should be regarded as a key component of resilience measurement. Therefore, qualitative research has potential advantages in the exploration and evaluation of such subjective states. This study reviewed previous studies on resilience, positive psychology, post-traumatic growth, and coping to better understand the process of survivors adapting to life after experiencing BC. The adaptation process and coping mechanisms of BC survivors in the face of adversity were analyzed. Individuals cannot do without the support of the environment, and they need to constantly learn and reflect on themselves and gradually practice the ability to control themselves. Their attitudes and experiences in coping with suffering can bring insights and support to people who are also experiencing various kinds of suffering, and also allow more people to see the role of resilience in the BC community and their families. It has reference value for more staff engaged in BC services and BC survivors to enhance their resilience. Social workers should pay attention to maladjusted survivors and help them identify possible issues and needs. From the perspective of resilience, according to the different stages of their illness, social workers can pay attention to their most urgent needs at the moment, tap into their social and psychological resources, and make plans together with them. They can also guide illness recovery and assumptions, encourage self-reflection, correct misunderstandings, and prevent harmful actions. Social workers should recognize individual abilities, provide hope, and empowerment, and help the survivors learn positive coping methods. They can also play an important role by helping survivors' family members, promoting the family system's function, and fostering the healthy development of family relationships (Traa et al. 2015). At the same time, social workers can create a mutual aid platform for BC groups and enrich the lives of BC survivors through high-quality and interesting services (Hinson & Sword 2019).

## CONCLUSION

This study used a systematic integration method to analyze and summarize qualitative research related to the resilience of BC survivors. The narratives of BC survivors intuitively reflect that resilience is affected by the interaction between the individual and the external environment. The physical, psychological, and social aspects of BC survivors need to be paid attention to. Resilience is a process of constantly breaking the existing balance and constantly continuously reconstructing it. Social workers should use their strengths and perspectives to believe in their abilities and empower them.

## LIMITATIONS

The literature in this study includes many countries, and the sample size of each country is insufficient. Most of the articles study Chinese BC survivors. Due to the differences in culture and medical treatment in different countries or regions, the research conclusions are mainly based on Chinese characteristics. They need a more accurate-comprehensive analysis of countries. The selection of literature for this qualitative research has few references, which has caused certain



limitations to the systematic research. For future research, further exploration of the relationship between the resilience of BC survivors at different stages with mixed research combining qualitative and quantitative research is suggested. Influencing factors provide a theoretical basis for the formulation of resilience intervention programs.

#### ETHICS APPROVAL

This study was approved by the UKM Research Ethics Committee (Ethics Code No. JEP-2023-728).

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#### DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author(s).

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