



Review

Role experiences of women with breast cancer as daughters: A qualitative meta-synthesis



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ABSTRACT

Objective: To synthesize qualitative data on the role experiences of women with breast cancer as daughters, and thereby provide inspiration and reference for psychological and social interventions for these patients and their families.

Methods: Six English databases (PubMed, Web of Science, CINAHL, Embase, Cochrane Library, and Joanna Briggs Institute) and four Chinese databases (CNKI, Wanfang, VIP, and CBM) were searched from inception to June 2024 to retrieve qualitative or mixed-methods studies on the role experiences of women with breast cancer as daughters. The Joanna Briggs Institute Critical Appraisal Tool for qualitative research was used to evaluate study quality, and the results were integrated using a meta-aggregation approach.

Results: Eighteen studies were included in this meta-synthesis: 37 findings were extracted and aggregated into 10 categories and three synthesized findings. Synthesized findings focused on negative experiences in the role of daughter; positive experiences in the role of daughter; and support needs in the role of daughter. The confidence of all synthesized findings was moderate.

Conclusions: Emphasis should be placed on the role experiences of women with breast cancer as daughters, and targeted practical assistance and professional support should be provided to promote the stable development of the patient's relationship with their parents and enhance the coping ability of both patients and their families.

Systematic review registration: PROSPERO, CRD42023456567.

Introduction

Breast cancer is the most frequent neoplasm affecting women worldwide.¹ According to the World Health Organization, approximately 2,295,833 women were diagnosed with breast cancer in 2022, accounting for 23.8% of the global incidence of cancer in women.² Both breast cancer rates and numbers of young patients are increasing, and these trends are expected to persist for an extended period.³ With continued advances in medical technologies, the survival rate of patients with breast cancer has improved;⁴ however, diagnosis and treatment of breast cancer remains a highly traumatic event. Patients with breast cancer experience both physical problems, such as limb edema, pain, and fatigue, and face psychological issues, including sleep disturbance and fear of cancer recurrence.^{5,6} Such problems affect the functions of women with breast cancer within families, leading to changes in family responsibilities and role restrictions.⁷ Daughter is an important family role that women assume in families. The sudden change in the health status of women with breast cancer directly threatens their original role and

function as daughters in the family.⁸ Shen et al.⁹ found that the disease caused a significant decline in the energy of female patients with breast cancer, which seriously affected their caring ability, making it difficult to normally assume the responsibilities and obligations of supporting their parents. As primary caregivers for elderly parents, women with breast cancer bear the responsibility of caring for their parents while enduring a range of physical and mental discomfort related to the illness, leading them to confront numerous dilemmas.

With the development of psycho-oncological care, an increasing number of researchers have focused on the impact of breast cancer on the daughter role of affected women. Wang et al.¹⁰ conducted interviews with 15 young female breast cancer patients and found that the deterioration of familial role functions significantly impeded these patients' ability to fulfill their caregiving responsibilities towards their parents and children, as they had done previously. In some cases, they were even compelled to seek assistance from their elderly parents to care for themselves and their children. This phenomenon led women with breast cancer to experience strong negative psychological emotions such as guilt

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and remorse, which seriously affected their quality of life.¹¹ Zhang et al.¹² investigated the psychological experiences of daughters with breast cancer who disclosed their diagnosis to their parents. Their findings revealed that these daughters encountered substantial challenges in communicating with their parents regarding their condition, leading to significant emotional and psychological burdens. Tang, in a qualitative study, examined the relationship dynamics between daughters with breast cancer and their parents.¹³ The study highlighted that interactions between these daughters and parents became increasingly conflicted and complex. Overall, the adverse effects and family responsibilities caused by breast cancer impose various challenges for daughters, creating a major psychological burden and acting as a barrier to their quality of life and family communication.¹⁴

Previous studies attempted to explore the influence of breast cancer on the women's daughter role, however, these studies generally focused on a singular research perspective, such as the family role changes,¹⁰ communication challenges,¹² and the relationship between daughters with breast cancer and their parents.¹³ Individual studies may be difficult to fully reflect the role experiences of women with breast cancer as daughters. Furthermore, previous systematic reviews on the family roles of women with breast cancer have focused predominantly on their roles as wives^{15,16} or mothers,^{17,18} and systematic reviews of comprehensive qualitative research specifically addressing experiences in the role of daughter are lacking. Therefore, there is a need to consider the role experiences of women with breast cancer as daughters in a rigorous and complete way. In this study, we used the meta-synthesis method to integrate qualitative findings from relevant studies, aiming to provide a comprehensive and systematic description of the experiences of breast cancer patients who are also daughters. This synthesis contributes to a deeper comprehension of the multifaceted dilemmas these individuals encounter and the specific demands of their role as daughters. Consequently, it provides valuable insights for health care professionals, enabling them to develop and implement more effective support to cultivate positive coping strategies and effective family support for these patients.

Methods

Aims and design

The aims of this study were to systematically integrate the experiences of women with breast cancer in the role of daughters, and thereby provide inspiration and reference to inform psychological and social interventions for patients with breast cancer and their families. The study was registered on PROSPERO (Registration No. CRD42023456567). Literature was screened and analyzed using Endnote software. The Joanna Briggs Institute (JBI) Critical Appraisal Tool for qualitative research in Australia was used to evaluate the quality of the included studies.¹⁹ A meta-aggregation approach was used for qualitative evidence synthesis.¹⁹

Inclusion and exclusion criteria

The selection criteria were based on the PICoS tool.¹⁹ Studies were included if they met the following criteria: (1) Population: female patients with breast cancer and/or their parents; (2) Phenomena of interest: experiences and feelings of women with breast cancer in their role as daughters; (3) Context: conducted in any undisturbed geographic and clinical setting, including hospitals and communities; (4) Study design: studies that applied qualitative methods, including phenomenological studies, case studies, narrative studies, grounded theory studies, and mixed-methods studies, among others.

Quantitative studies, case reports, and conference papers; systematic reviews and reviews; studies that were not published in Chinese or English; duplicate publications, studies with incomplete data, and those with inaccessible full text were excluded.

Search strategy

Ten electronic databases, including six English databases (PubMed, Web of Science, the Cumulative Index to Nursing and Allied Health Literature [CINAHL], Embase, the Cochrane Library, and JBI) and four Chinese databases (China National Knowledge Infrastructure [CNKI], Wanfang Data, Weipu [VIP] and China Biology Medicine [CBM]), were searched from inception to June 2024 for studies exploring the experiences of women with breast cancer in the role of daughter. For each main concept, MeSH and free terms were combined for a comprehensive search. To avoid missing data, additional studies were then manually searched for positive citation tracking by checking the reference lists of the included articles and relevant systematic reviews. Search strategies were adapted according to the indexing system of each database. Search terms and structure in PubMed are presented in Table 1. The full search strategy for each database is described in Supplementary File 1.

Study selection

Endnote X9 software was used to import all citations and remove duplicate citations. Then, two reviewers (MX and LZ) performed initial title and abstract screening to eliminate off-topic studies. Subsequently, studies were screened by two reviewers for full-text reading, based on the inclusion and exclusion criteria. Disagreements between the two reviewers were resolved by a third researcher (HJ). The Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flowchart provides an outline of the screening process.

Quality assessment

The two reviewers (MX and LZ) independently assessed eligible articles. Disagreements between the reviewers regarding the eligibility of articles were resolved by the third researcher (HJ). The JBI Critical Appraisal Checklist for Qualitative Research (JBI-QR) offers a framework for assessing the quality of potential studies and can help appraise different aspects of research. The 10-item JBI-QR was used to evaluate the methodological quality of included articles.¹⁹ Each item in this checklist was answered with: "yes," "no," "not applicable," or "unclear." If the criteria were fully met, the possibility of bias was minimal, and the study was classified as Grade A; if the criteria were partially met, the possibility of bias was moderate, and the study was classified as Grade B; and studies that did not meet any of the assessment criteria were considered to have a high possibility of bias and classified as Grade C. Only studies classified as grade A or B were considered for inclusion in the meta-synthesis.

Table 1
Search terms and structure in PubMed.

	Search terms and structure
#1	"Breast Neoplasms"[MeSH Terms] OR "breast tumor*" [All Fields] OR "Breast Cancer" [All Fields] OR "mammary cancer*" [All Fields] OR "Malignant Neoplasm of Breast" [All Fields] OR "breast malignant neoplasm*" [All Fields] OR "breast malignant tumor*" [All Fields] OR "breast carcinoma*" [All Fields] OR "BC" [All Fields] OR "mammary neoplasm*" [All Fields] OR "mammary carcinoma*" [All Fields]
#2	"Child" [MeSH Terms] OR "Adult Children" [MeSH Terms] OR "offspring*" [All Fields] OR "daughter*" [All Fields] OR "son" [All Fields]
#3	"Parents" [MeSH Terms] OR "parenthood*" [All Fields] OR "father*" [All Fields] OR "mother*" [All Fields]
#4	"Qualitative Research" [MeSH Terms] OR "Grounded Theory" [MeSH Terms] OR "qualitative*" [Title/Abstract] OR "interview*" [Title/Abstract] OR "experience*" [Title/Abstract] OR "perception*" [Title/Abstract] OR "feelings" [Title/Abstract] OR "attitude*" [Title/Abstract] OR "perspective*" [Title/Abstract] OR "thought*" [Title/Abstract]
#5	#1 AND #2 AND #3 AND #4

Data extraction

The two reviewers (MX and LZ) independently extracted data from the included studies. Any disagreements were resolved by discussion with the third researcher (HJ). The data extracted included information regarding the authors, year of publication, country, qualitative research methods, participants, phenomenon of interest, and main findings.

Data synthesis

The findings of the studies that were eventually included were integrated using a meta-aggregation approach. Based on similarity of meanings, findings were combined to form different categories, which were then subjected to meta-synthesis to generate comprehensive synthesized findings by meta-aggregation.¹⁹ The synthesized findings were distilled from discussions between the two reviewers, and any disagreements were further negotiated and resolved by the third researcher.

Confidence in the findings

The JBI ConQual approach was adopted to assess confidence in the final qualitative synthesized findings at four levels: high, moderate, low, and very low.²⁰ For each final synthesized finding, a confidence level was established based on the dependability and credibility scores of the included studies. Dependability was appraised using items 2, 3, 4, 6, and 7 from the JBI-QR.¹⁹ All qualitative studies were first rated as “high” and were downgraded based on the answers to the five questions. If four to five of the responses to these questions were yes, then the rank remained at its current level. If two to three of these responses were yes, the rank moved down one level (i.e., from high to moderate). If one or none of these responses was yes, the rank moved down two levels (from high to low, or moderate to very low). The final synthesized findings were then

downgraded based on the aggregate level of dependability of the included studies.

The credibility of the findings was established by assessing the congruency between the interpretation of the authors and the supporting data. Credibility was evaluated as unequivocal, equivocal, or unsupported. Final synthesized findings were further downgraded for credibility if not all included results were unequivocal.

Results

Search results

The results of the selection process are presented in Fig. 1. A total of 3609 studies were identified through database search ($n = 3599$) and other sources ($n = 10$). EndNote X9 software was used to import all search results. After removing 706 duplicates, a total of 2903 articles were identified. Using the inclusion and exclusion criteria, two trained researchers independently screened the titles and abstracts, resulting in exclusion of 2707 papers. After full-text review, 18 of 196 articles that met the eligibility criteria were included.^{9-13,21-33} No study was excluded due to quality issues.

Quality appraisal

Evaluation of the quality of the 18 included studies using JBI-QR revealed several key findings. All 18 studies were rated “yes” for item 2 “research objectives or questions consistency with methodology”, item 4 “representation and analysis of data consistency with methodology”, item five “interpreted results consistency with methodology”, and item 9 “research ethical according to current criteria”. For item 1 “philosophical basis consistency with methodology”, consistency was observed in nine studies,^{12,13,21-24,26,29,31} whereas the philosophical basis for the

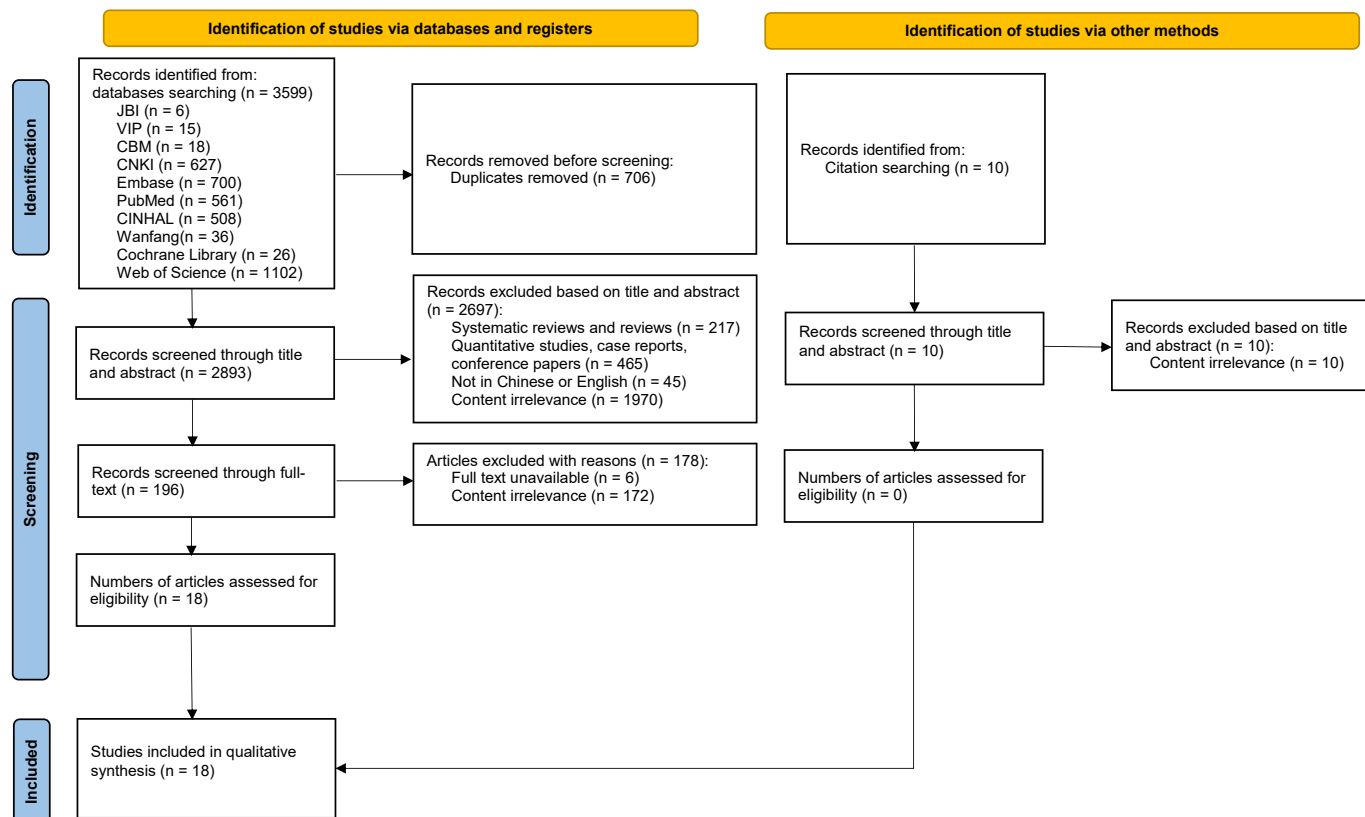


Fig. 1. PRISMA for diagram of the selection process. CBM, China Biology Medicine; CNKI, China National Knowledge Infrastructure; JBI, Joanna Briggs Institute; PRISMA, Preferred Reporting Items for Systematic reviews and Meta-Analyses; VIP, Weipu.

remaining nine studies was unclear. For item 3 “data collection methods consistency with methodology”, one study²⁴ exhibited inconsistencies, one study¹⁰ was rated “unclear”, and the remaining 16 studies were rated “yes”. For item 6 “statement about locating the researcher culturally or theoretically”, only two studies^{21,29} explicitly described the cultural background and values of the researcher, while the other 16 studies were rated “no”. For item 7 “researcher influence on the research and vice versa”, eight studies^{10,13,21,26,28-31} were rated “yes”, and the remaining 10 studies were rated “no”. For item 8 “participants and their voices adequately represented”, 13 studies were rated “yes”, three studies^{9,27,28} were rated “unclear”, and two studies^{23,24} were rated “no”. For item 10 “conclusions drawn from the research report flow from the analysis or interpretation of the data”, only one study²² was rated “unclear”, and the other 17 studies were rated “yes”. Overall, two included articles were rated A and the remaining 16 articles were rated B on quality appraisal (Fig. 2).

Characteristics of the included studies

The characteristics of the studies included in the qualitative meta-synthesis are summarized in Table 2. Eighteen articles were included in the analysis and synthesis. All included studies were published between 2008 and 2024 and were conducted in the following eight countries: Saudi Arabia (n = 1), Brazil (n = 1), The United States of America (n = 2), The Islamic Republic of Iran (n = 1), The Republic of Türkiye (n = 1), Belgium (n = 1), India (n = 1), and China (n = 10). Thirteen studies used phenomenological research, three studies used grounded theory, one study used narrative research, and one was a case study.

Meta-synthesis of the qualitative data

We extracted a total of 37 findings from the 18 included studies, and all findings were rated as unequivocal. Findings were aggregated into 10 categories, based on similarities of meanings, which were then meta-aggregated into three synthesized findings. A full overview of the findings linked to categories and synthesized findings is presented in Supplementary File 2. The three synthesized findings were as follows: (1) negative experiences of the role of daughter; (2) positive experiences of the role of daughter, and (3) support needs in the role of daughter. The synthesized findings and categories identified in this study are presented in Fig. 3.

Synthesized finding 1: Negative experiences in the role of daughter

Diagnosis and treatment of breast cancer are challenging and stressful processes. Women who were both diagnosed with breast cancer and served as primary caregivers for elderly parents often encountered a complex array of negative experiences. Five categories were included in this synthesized finding: “conflict between the roles of patient and daughter”, “negative emotions”, “difficulty communicating with parents”, “strained relationship with parents”, and “uncertainty about the future.”

Category 1: Conflict between the roles of patient and daughter. Four studies explored the profound conflict experienced by daughters with breast cancer as they navigated the demands of their disease treatment alongside their family responsibilities.^{9,10,13,21} Facing the dual challenges of providing care for aging parents and managing illness, daughters with breast cancer could encounter difficulties in reconciling their roles as both “daughters” and “patients”.

“I struggled a lot in carrying out my role as a daughter to my parents. Sometimes I had to stay with my mother at the hospital when she was getting sick, while I was suffering from the chemo’s side effects.”²¹

During the course of managing their illness, daughters with breast cancer often prioritized monitoring their own condition and treatment outcomes, potentially reducing their focus on their parents.

“I might be concerned about their physical health or something, but now I might be focusing on my own body.”¹³

“I used to visit my mother once a week, but I haven’t seen her since I got sick.”¹⁰

As the illness progressed and deteriorated, the functional abilities of daughters were compromised, making attend to their parents challenging.

“I can’t take care of them because I’m sick.”⁹

“When I was sick, I didn’t come home to see my mum for months.”¹⁰

Category 2: Negative emotions. This category referred to the fact that the occurrence of breast cancer profoundly affected the original living situation of daughters and their parents, leading to a series of negative emotions in daughters. Four studies explored negative emotions in

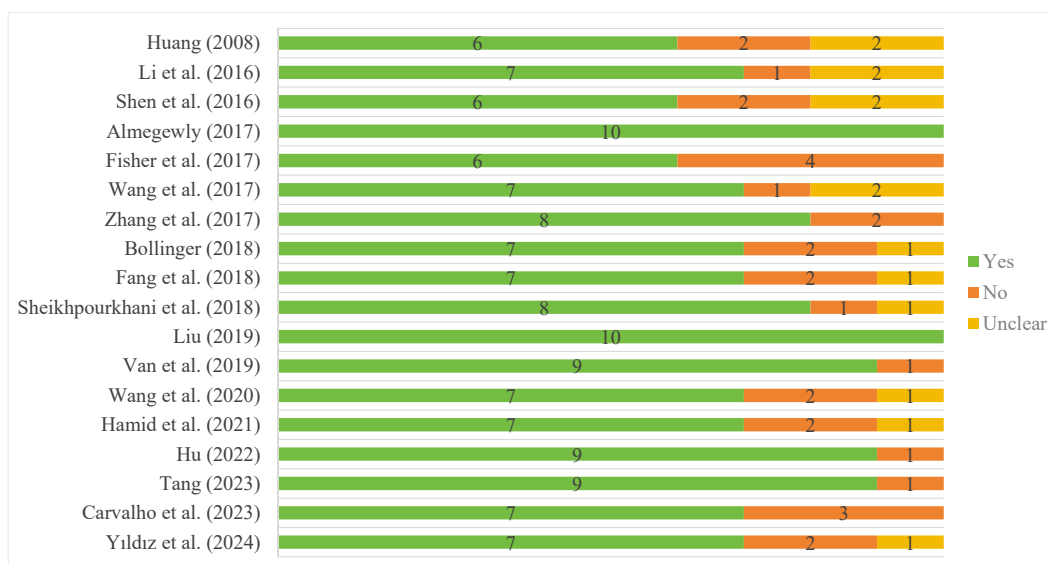


Fig. 2. Assessment of the methodological quality of included studies based on JBI’s Critical Appraisal Checklist for Qualitative Studies. JBI, Joanna Briggs Institute.

Table 2
Characteristics of the 18 studies included in this meta-synthesis.

Author (year)	Country	Qualitative research methods	Participants	Phenomenon of interest	Main findings
Huang (2008)	China	Phenomenological research	12 young breast cancer patients	The real psychological experiences of the youthful patients in the diagnosis period of breast cancer.	Five themes were identified: ① Changes in self-concept; ② Strong sense of uncertainty; ③ Transformation of the role of the self; ④ Change in social responsibility and adaptability; ⑤ Lack of knowledge and skills for early detection.
Li et al. (2016)	China	Phenomenological research	12 young female breast cancer patients after radical mastectomy	The real experiences of young breast cancer patients after radical mastectomy.	Six themes were identified: ① Self-image disorder; ② Sexual disharmony and fertility concerns; ③ Changes in family roles; ④ Need for information; ⑤ Uncertainty about future career; ⑥ Need for professional psychological support.
Shen et al. (2016)	China	Phenomenological research	18 breast cancer patients	The psychological experiences of breast cancer patients during the period of diagnosis.	Four themes were identified: ① Strong sense of uncertainty; ② Psychosocial stress; ③ Need for information; ④ Reflection on disease attribution.
Almegewly (2017)	Saudi Arabia	Phenomenological research	18 breast cancer patients	The lived experience of breast cancer survivorship of Saudi Arabian women.	Five themes were identified: ① survivorship experience; ② cancer change me; ③ identity; ④ faith and belief; ⑤ health care experience.
Fisher et al. (2017)	The United States of America	Phenomenological research	40 breast cancer patients and 38 mothers/daughters (12 mothers, 26 daughters)	Experiences of “openness” between mothers and daughters during breast cancer.	Mothers and daughters talked about treatment side effects and procedures, disease risk and prevention, and medical decisions. They avoided discussions about distressing emotions and topics as well as uncertainty about the future. Motivations to disclose/avoid centered on protecting themselves and/or their mother/daughter.
Wang et al. (2017)	China	Phenomenological research	15 young breast cancer patients	Family role functioning and psychological experiences of young women with breast cancer.	The family's role functioning was impaired during hospitalization. Meanwhile, the patients felt low self-worth and guilt, and worried about their children and marriage. Role stress and role motivation rose when the patients came home. Family role functioning recovered during the convalescence. Patients felt happy and satisfied. Patients' psychological experience changes with family role functioning.
Zhang et al. (2017)	China	Phenomenological research	19 breast cancer patients	The psychological experience of breast cancer patients before and after informing their parents of cancer diagnosis.	The psychological experience before breast cancer patients inform their parents of cancer diagnosis includes worrying about increasing the psychological burden of parents, worrying about affecting parental health, thinking parents can't help them, and feeling aggrieved and tired. There are positive and negative psychological experiences after breast cancer patients informing parents. Positive psychological experiences including parents are stronger than we expected, intimacy increased, and psychological burden reduced. Negative psychological experiences include feeling guilty about parents and a sense of restraint.
Bollinger (2018)	The United States of America	Grounded theory	12 female breast cancer patients	Biopsychosocial challenges and needs of young African American women with triple-negative breast cancer.	Six themes were identified: ① longer, more aggressive treatment trajectories; ② more difficult struggles with feminine identity; ③ the presence of fertility and parenting issues; ④ higher burdens of care; ⑤ barriers to separation and individuation as a maturation milestone; ⑥ feeling out of place compared with peers.
Fang et al. (2018)	China	Phenomenological research	One breast cancer patient who received chemotherapy	The experiences of self-perceived burden in young patients with breast cancer during chemotherapy.	Four themes were identified: ① Significantly negative psychology; ② Severe Symptoms of Distress; ③ Lack of family roles; ④ Loss of self-worth.
Sheikhpourkhani et al. (2018)	The Islamic Republic of Iran	Phenomenological research	17 breast cancer patients	Perspectives of Iranian women with breast cancer About the role of social support.	Three themes were identified: ① family support (spousal support and first-degree relatives' support); ② community support (peer support group and governmental/non-governmental organizations support); ③ the health care provider's support.

(continued on next page)

Table 2 (continued)

Author (year)	Country	Qualitative research methods	Participants	Phenomenon of interest	Main findings
Liu (2019)	China	Case study	One young patient with advanced breast cancer	The main dilemmas faced by young patients with advanced breast cancer.	Five themes were identified: ① Negative psychological states; ② Lack of financial support; ③ Strain on interpersonal relationships; ④ Decreased sense of self-identity; ⑤ Under the weather.
Van et al. (2019)	Belgium	Grounded theory	11 cancer patients, including 9 breast cancer patients	Cancer patients' experiences of communicating and dealing with their older parents.	Depending on the situation, the time frame, and the person the patients are talking about, cancer patients oscillate between perspectives (I, they, and We). A common denominator in all three perspectives is silence fuelled by different forms of solicitude (self-protection and other-protection). This solicitude underpins the cancer patients' communicative behaviors and ways of relating to their parents.
Wang et al. (2020)	China	Phenomenological research	44 breast cancer survivors	Treatment decision-making, family influences, and cultural influences of Chinese breast cancer survivors.	Three themes were identified: ① treatment decision making; ② family influences; ③ cultural influences.
Hamid et al. (2021)	India	Phenomenological research	12 breast cancer patients	Experiences of social support among Kashmiri women with breast cancer.	Four themes were identified: ① Social support and significant others; ② Social support and important others; ③ Social support and health care providers; ④ Religion and spirituality.
Hu (2022)	China	Narrative research	11 breast cancer patients	What is the disease experience of breast cancer patients? What does the disease mean for breast cancer patients? Have breast cancer patients' understanding of the meaning of life changed after the disease?	Six themes were identified: ① Sudden attacks of disease; ② The Bitterness of Treatment; ③ Living with Disease; ④ New perceptions of existence; ⑤ New attitudes towards life; ⑥ New life goals.
Tang (2023)	China	Grounded theory	8 pairs of breast cancer patients and their parents, 8 volunteers of the Breast Cancer Patients' Support Association	The relationship between breast cancer patients and their parents.	At the stage of surgical treatment, anti-cancer is the absolute consensus of parents and patients, so both sides hid their negative feelings generated by the support and tried to maintain unity driven by responsibility and emotion. However, with the extension of treatment time, the parent-child relationship enters the "running-in period", especially in the stage of chemoradiotherapy. The long-term synchronous life makes the parent-child relationship show a mixed mode of unity and segregation. At the stage of recovery, the problems arising from the treatment of the disease brought about new ambivalence between parents and patients, which became a hidden danger to the unity of the parent-child relationship.
Carvalho et al. (2023)	Brazil	Phenomenological research	40 breast cancer patients	Women's perception about the discovery of breast cancer amid the COVID-19 pandemic.	Two themes were identified: ① Discovery; ② Impact of the disease.
Yıldız et al. (2024)	The Republic of Türkiye	Phenomenological research	17 breast cancer patients	The perceptions of patients with breast cancer regarding illness.	Six themes were identified: ① body image; ② spirituality ③ social/professional support; ④ fear/sadness; ⑤ awareness of early diagnosis ⑥ role change.

daughters with breast cancer when spending time with their parents.^{10–12,31} Daughters with breast cancer often shouldered the responsibility of caring for elderly parents within their families, and the diagnosis and treatment of the disease imposed significant physical and psychological stress, further compounding their already substantial family obligations. As a result, daughters might experience feelings of guilt, perceiving themselves as burdens.

"Anyway, there's a lot to do, the elderly parents have to be taken care of, and I have to think about that."¹⁰

"I'm not married yet, and I haven't had a chance to honor my parents properly, and they're coming to the hospital to take care of me. I feel guilty."¹¹

"It's really hard because when I'm down I feel that might bring them down too. It comes down to a feeling of guilt. I often feel guilty because I cause so much distress and sorrow. They've got enough to cope with."³¹

To protect their parents, daughters did not dare to tell them about their condition and inner worries and felt wronged internally. Further, daughters tried to maintain the living conditions of their parents before the illness and felt tired of doing things that they were currently incapable of doing.

"I feel like I've been wronged, and I want to tell them."¹²

"Once, despite being unwell, I took them out to play and subsequently developed a cold and fever the next day. The exhaustion from looking after them was overwhelming. I felt very tired of not telling them I was sick."¹²

Category 3: Difficulty communicating with parents. Daughters diagnosed with breast cancer can find it difficult to inform their parents of their diagnosis and the state of their illness. This category was supported by four studies.^{9,12,23,24} When confronted with an unexpected breast cancer diagnosis, daughters often found it challenging to muster the courage to

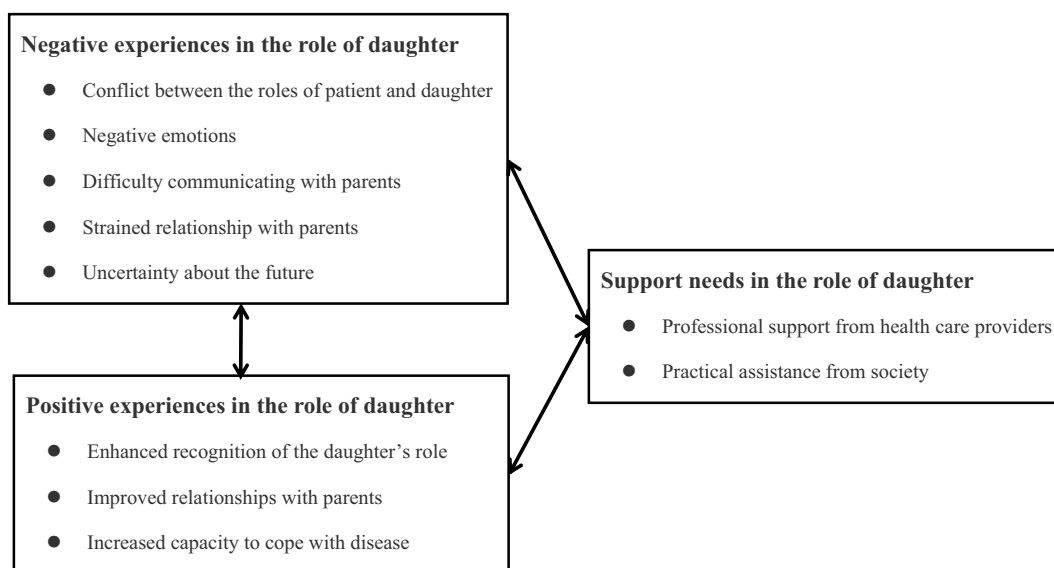


Fig. 3. The synthesized findings and categories identified of this study.

disclose the truth to their parents. They were concerned that the cancer diagnosis could exacerbate the mental strain experienced by their parents and feared that their parents might struggle to cope with the news and experience physical ailments.

“On the day I found out, I did not tell my mother. My sister went out to tell her because I did not dare to tell her myself.”²³

“I didn’t dare tell my parents. I couldn’t let them worry.”⁹

“My mother lacked effective coping mechanisms for her emotions, and sharing my disease with her only added to her emotional burden.”¹²

“I’m afraid she’ll get excited, she has high blood pressure, so I’m afraid she won’t be able to control it.”¹²

Some daughters with breast cancer perceived that their elderly parents might be unable to provide assistance with their treatment, due to limited understanding and insufficient capacity.

“I believed that disclosing the diagnosis of the disease would not be beneficial. Considering their advanced age, there were limited options for them to address it. Telling them won’t help.”¹²

Moreover, when parents infringed upon the privacy of a daughter, this conduct could significantly undermine the trust dynamic between the daughter and their parents, causing the daughter to refrain from confiding in their parents.

“She was sharing my thoughts and feelings and everything with basically everyone she knew. I will never talk about my feelings.”²⁴

Category 4: Strained relationship with parents. This category explored the strained relationship that emerged between daughters with breast cancer and their parents in the context of illness. This category was supported by five studies.^{12,13,22,29,31} After learning about the breast cancer diagnosis of their daughter, parents exhibited excessive protectiveness, leading daughters to experience a profound sense of confinement. Parental care, which was characterized by “demands” and “pressure”, induced feelings of anxiety and irritation in the daughter. As treatment progressed, the physical condition of daughters gradually improved, and they yearned for increased autonomy and independence.

“If I’m at home, my parents watch me all day long, saying that you’re a patient, and they won’t let you do anything if you’re sick. I feel bad about it.”¹²

“I’m a sick person, and I will feel nervous and irritated if they go on to press me with some demands, telling me to eat this and not to eat that.”¹³

“I’m ready to get back to a sense of normalcy and see about working again and just pretty much getting out of this house.”²²

Furthermore, some daughters reported a significant decline in their self-care abilities following their diagnosis of breast cancer, leading them to seek assistance and support from their parents; however, the indifferent attitudes of parents often left daughters feeling disappointed. They believed that their parents became weary of them, due to the ongoing responsibility of care. This miscommunication hindered the establishment of mutual understanding between daughters and their parents.

“In retrospect, I talked about my behavior with my parents. I asked them to see it from my perspective. Because in the end they just watch it happen.”³¹

“My mother gets impatient after a while, and impatience is common, after all, you’re just bothering people when you’re sick all the time.”²⁹

“Sometimes I just think I’ve saved my parents enough trouble. I’m doing the very best that I can. But it still displeased my parents.”²⁹

Category 5: Uncertainty about the future. This category referred to the psychological state of daughters with breast cancer, caused by their inability to accurately predict and understand the future development of the disease, treatment effects, life changes, and other factors. This category was supported by three studies.^{13,21,27} Parents were important caregivers for daughters with breast cancer. Daughters articulated concerns regarding the absence of familial support following the eventual demise of their parents, resulting in a profound sense of uncertainty about their future prospects.

“I don’t know how I can explain it, but I feel confused and am thinking too much about the future, thinking what would happen to me if my father died ... he is the one who keeps me safe.”²¹

Daughters with breast cancer also feared that they would not be able to take care of their parents if their disease was not completely cured. They felt a strong sense of uncertainty about the future lives of their parents.

“If my disease is not completely cured and I leave my elderly parents behind, what will they do in the future?”²⁷

Despite the stabilization of the physical condition of some daughters with breast cancer, they continued to feel apprehensive about potential unforeseen events in the future, fearing that it might lead to distress and impose additional burdens on their families.

"If something happens to me, not only will I suffer, but my family will suffer as well."¹³

Synthesized finding 2: Positive experiences in the role of daughter

Throughout the process of managing their illness alongside their parents, daughters with breast cancer could also encounter various positive experiences. Three categories were included in this synthesized finding: "enhanced recognition of the daughter's role", "improved relationships with parents", and "increased capacity to cope with disease."

Category 6: Enhanced recognition of the daughter's role. The unique experience of receiving a breast cancer diagnosis often led daughters to develop a deeper understanding and appreciation of life, as well as of the role of daughter. This category was supported by two studies.^{12,26} Illness heightened the awareness among daughters with breast cancer of the preciousness and fragility of life. They hoped to fulfill their filial duties, resulting in a heightened sense of responsibility within them.

"I just think that life is so precious and human life is very fragile sometimes."¹²

"When I get better, I'll go back to my mom more often. That's the first thing I'll do."²⁶

"As a child, I depended on my parents; as an adult, I wish to support my parents."²⁶

Category 7: Improved relationships with parents. This category referred to the process of managing breast cancer alongside parents, which could unexpectedly strengthen the bond between the daughter and their parents, fostering deeper familial affection. This category was supported by two studies.^{12,13} Throughout the experience of dealing with breast cancer alongside their parents, daughters realized that their parents were not as fragile as they initially perceived, leading to a shift in their misconceptions about them.

"Parents will always be the ones who stand up to the sky, so it's not like they can't handle it as we thought."¹²

After falling ill, daughters with breast cancer often increased their interactions with their parents and developed closer bonds with them, valuing the time spent together even more.

"I go to my parents' place every day and it just means that this kinship is getting stronger, bringing us closer together."¹²

"I cherish the present, and I would like to go home for the holidays. I call my parents often and want to spend more time with them."¹²

Under the common goal of "Fighting Cancer Together," old conflicts in the lives of daughters and their parents were eased.

"I used to be forced to go on blind dates every week. But after I had this illness, my parents rarely mentioned it anymore. Now they're very submissive and supportive of whatever I want to do in the future."¹³

"From this time when I got sick, I felt that my old complaints were gone, I didn't hate them, they cared more about me, and I felt especially close."¹²

Category 8: Increased capacity to cope with disease. This category implied that the capacity of daughters to cope with the disease was fortified by the support and assistance of their parents, and was supported by five studies.^{25,30-33} When daughters were diagnosed with cancer, parents

would spare no effort in providing support and assistance to them and accompanying them through their treatment. Parents played crucial roles in motivating daughters to persist with their treatment.

"My mother is nearly 65 but she stayed with me when I was admitted to the hospital for surgery. After being discharged from there, she took care of all my needs at home."²⁵

"My mother's and father's hands are always with me, especially my father's. We go to chemotherapy together."³³

"Sometimes I fell asleep crying, worrying about how sad my parents would be if I could not overcome the illness. If I were gone, it would be tragic to leave them in this world. I should stay alive for them."³²

The presence and support of parents could instill hope in daughters with breast cancer and enhance their confidence in overcoming the disease.

"My sisters and my mother helped me a lot. Maybe that's why I did not notice my illness like others. They did what they could. These things raised my hope."³⁰

"We've got a kind of sense that whatever, whatever happens, you know, we'll be able to get through it, manage it, make it as good as we can."³¹

Synthesized finding 3: Support needs in the role of daughter

During breast cancer, daughters found themselves unable to cope with the effects of the disease alongside the challenges of managing their relationships with their parents. Consequently, they had multiple support needs. Two categories were included in this synthesized finding: "professional support from health care providers" and "practical assistance from society."

Category 9: Professional support from health care providers. This category referred to the need for professional support from health care providers for women with breast cancer in their role as daughters and was supported by two studies.^{21,31} The physical and mental stress caused by the illness, combined with various communication barriers, often led daughters with breast cancer to misinterpret their parents. Professional psychological support was crucial in assisting daughters to effectively assess issues and improve their relationships with their parents.

"And yeah she (mother) avoided me. And she never asked directly how I was doing, but always through the grapevine. Through my sister or brother. I blamed her for a lack of interest in my situation. After a while, and after several conversations with a psychologist I could put things in perspective. She presumably couldn't handle the situation. She denied it to herself and, you know, I distanced myself on purpose. Eventually, I made efforts to come closer to get her as I realized that she didn't want to burden me with questions."³¹

Daughters with breast cancer believed that the lack of knowledge of parents about breast cancer led to increased parents' worry. To fulfill their duty to protect their parents, daughters expected health care providers to provide the necessary informational support for their parents to effectively cope with breast cancer.

"I think it would be better to have a family consultation to educate the family member about cancer and process of the treatment and how they could cope with it; my mother was worried about me because she didn't have enough information about the disease."²¹

Category 10: Practical assistance from society. This category referred to the practical support from society required by women with breast cancer in their role as daughters, which was supported by three studies.^{11,27,29} Daughters were obligated to ensure that their parents received essential living conditions, including material and financial support. However, the

treatment and recovery of breast cancer not only imposed significant medical costs on daughters but also resulted in a decline in their work capacity, thereby impacting their income. These challenges led to daughters being unable to assume the financial responsibility of supporting their parents and even caused elderly parents to have to exert extra effort to share their daughter's financial burden. Necessary economic assistance could mitigate the financial strain on parents and alleviate the psychological burden experienced by daughters with breast cancer.

"I used to have a job that covered my living expenses, but I had to quit when I got sick. My family is from a rural area, and my parents work hard to make ends meet, so it's tough for them."¹¹

"I'm really happy that the low-income assistance application got approved. With a bit more money coming in, my dad can cut back on work, and my heart is comforted."²⁹

As their health improved, some daughters expected to return to work to ease the burden on their parents. Effective employment support was crucial for patients to reintegrate into society and return to work.

"I don't have a job right now either, so I'm just stuck at home waiting for my dad to make some money for my medical bills. I really hope to find a job I can handle once my situation gets better, so I can take care of myself."²⁹

"I really hope to find a job I can manage once I'm out of the hospital, so I can help ease the load for my family."²⁷

Confidence scores of the synthesized findings

The confidence scores of the synthesized findings are summarized in Table 3. The overall confidence scores for all synthesized findings were "moderate"; all three findings were downgraded one level, due to dependability limitations. No downgrade was required for credibility, since all extracted findings were rated as unequivocal.

Discussion

This study provided a broad overview of the experience of women with breast cancer in the role of daughters. We report synthesized findings from 18 qualitative studies, with data synthesis leading to construction of three analytical themes: negative experiences in the role of daughter; positive experiences in the role of daughter; and support needs in the role of daughter. Our synthesis can provide inspiration and serve as a reference to inform psychological and social interventions for these patients and their parents.

Daughters with breast cancer not only faced the threat to their lives posed by the disease, but also shouldered the responsibility of fulfilling familial roles as daughters. The results of this study indicated that this dual challenge inevitably led to negative experiences for daughters with breast cancer. Breast cancer served as a devastating stressor, giving rise to conflicts between the roles of patient and daughter for women affected by the disease, and presenting challenges in maintaining a balance between these two roles.²¹ While managing their illness, daughters often become more self-focused and less attentive to their parents, sometimes finding it challenging to assume responsibility for caring for them.^{9,10,13} This phenomenon triggered a range of negative emotional responses in

daughters with breast cancer, including heightened stress, feelings of guilt, self-blame, frustration, and emotional exhaustion.^{10-12,31} Additionally, daughters with breast cancer expressed uncertainty regarding their own future prospects and those of their parents.^{13,21,27} These negative experiences significantly diminished the quality of life of patients and could also impede treatment outcomes.³⁴ Hence, prioritizing the mental well-being of daughters with breast cancer and facilitating timely adjustments is crucial. Psychological interventions can significantly enhance the quality of life for individuals with cancer.³⁵ Cipolletta et al.³⁶ found that psychoeducational support groups had a positive effect on patients with breast cancer and their caregivers, reducing their scores on scales measuring anxiety, depression, and psychological distress. Shao et al.³⁷ found that guided self-help mindfulness-based interventions could reduce depressive and sleep disorder symptoms by mitigating rumination and worry in patients with breast cancer. Therefore, health care professionals should adopt appropriate nursing and intervention measures, according to the specific conditions of patients, to provide psychological care and alleviate the psychological burden on patients with breast cancer.

The disease resulted in a shift in the role of daughters with breast cancer from being caregivers to becoming individuals in need of care, leading to strained relationships between daughters and their parents.^{12,13,22,29,31} Some daughters harbored feelings of resentment towards the overbearing behavior of their parents.¹² Conversely, others asserted that their parents exhibited indifference towards their illness, and even became fatigued by the long-term care.³¹ This phenomenon may stem from communication barriers between daughters and their parents, which can result in misunderstandings and compound the psychological burden on daughters.^{9,12,23,24} Effective family communication can enhance the ability of patients to cope with illness, reduce conflict among family members, and optimize the function of patients in family roles.³⁸ Yu et al.³⁹ constructed a "parental support" intervention, designed to help patients with breast cancer communicate effectively with their parents about their cancer diagnosis, and their findings suggested that this intervention could help patients with breast cancer receive adequate support from their parents and increase the level of family care. Therefore, when treating daughters with breast cancer, health care professionals should focus on family communication and teach patients effective strategies to communicate with their parents about the disease, to improve the function of patients in their family roles.

As they have a common goal of fighting cancer, daughters with breast cancer and their parents experience an increase in behavioral and emotional interactions.²⁵ Our results showed that daughters experienced some positive experiences in their interactions with their parents. The unique experience of navigating breast cancer alongside one's parents could heighten the awareness of women of their roles as daughters and foster a greater sense of responsibility.^{12,26} Simultaneously, the relationship between daughters with breast cancer and their parents was improved, which was consistent with the findings of Ali et al.⁴⁰ Additionally, support and assistance from their parents improved the ability of daughters with breast cancer to cope with the disease.^{25,30-33} A previous study showed that family interaction patterns appeared to impact most strongly on the levels of perceived emotional support provided by the families of women with breast cancer.⁴¹ Good family interaction patterns appeared to be crucial when dealing with stressful situations, and women with breast cancer in these families felt supported by their family members and satisfied with the family support they received.

Table 3
Confidence of the synthesized findings.

Synthesized findings	Dependability	Credibility	ConQual score
1. Negative experiences in the role of daughter	Downgrade 1 level	No downgrade	Moderate
2. Positive experiences in the role of daughter	Downgrade 1 level	No downgrade	Moderate
3. Support needs in the role of daughter	Downgrade 1 level	No downgrade	Moderate

Moghaddam et al.⁴² found that family intervention programs to create support for women with breast cancer played an instructive and illuminating role in enabling women to apply positive strategies to obtain promotion in cancer coping. Therefore, health care professionals should develop scientific, practical, and feasible family intervention programs aimed at facilitating family support for patients with breast cancer, thereby strengthening their coping strategies in dealing with the disease.

Our results indicated that women with breast cancer in their role as daughters needed professional support increasingly, and they hoped health care providers could offer psychological and informational support for themselves and their families.^{21,31} Health care providers can implement positive psychology interventions to help daughters cultivate a positive mindset, which is instrumental in resolving misunderstandings and conflicts with their parents. This proactive approach not only facilitates improved communication but also strengthens the emotional bonds between the daughters and their parents.⁴³ A previous study showed that positive psychology interventions were capable of enhancing the quality of life, well-being, hope, meaning, optimism, life satisfaction, and benefit finding in women with breast cancer.⁴⁴ Zhang et al.⁴⁵ found that family-centered positive psychological interventions could improve positive psychological experiences of patients and caregivers and facilitate functional recovery for both patients and their families. In terms of informational support, health care providers are not only responsible for providing patients with information support and health education but also need to pay attention to the family members' perceptions of the disease. A previous research found that the family members' disease perception could influence the patient's quality of life and prognosis.⁴⁶ To help patients' parents understand the disease correctly and comprehensively, health care providers can employ various forms to provide informational support to the parents, such as symposia, paper brochures, and online consultations.

Our results indicated that women with breast cancer required practical assistance from society when dealing with their role as daughters, including financial support and employment support.^{11,27,29} A previous study showed that the economic burden associated with breast cancer primarily encompassed the following: expenses related to the acquisition of pharmaceutical materials, home assistance, and hospital transportation, along with a decrease in income.⁴⁷ Some daughters with breast cancer would bring a financial crisis to their parents, and the families needed necessary economic assistance from society to mitigate the financial strain on parents.²⁹ The detrimental impact on patient prognosis is more significant in those with heavier economic burdens.⁴⁸ The government needs to offer direct economic assistance to patients. Additionally, payment reform, for example through medical homes, bundled payments, and accountable care organizations, provides additional opportunities for cost control, while remaining focused on quality.⁴⁹

Alongside direct financial assistance from society, daughters with breast cancer also wanted to alleviate the economic burden by returning to work.^{27,29} Previous studies found that returning to work could lighten the financial burden of patients with breast cancer, enhance their quality of life, and increase their survival rates.^{50,51} Tiedtke et al.⁵² found that social support from the workplace seemed to be a key element in addressing the complexity of returning to work in breast cancer patients. Aguiar et al.⁵³ indicated that returning to work must be addressed as a cross-sectoral issue involving different levels related to personal circumstances, the health system, the social security system, and the workplace. Therefore, it is essential to develop and implement targeted interdisciplinary programs and services that offer employment support for daughters with breast cancer, thereby alleviating their economic burden and improving the function of their family roles.

Strengths and limitations

This study strictly followed the meta-aggregation approach and the JBI Critical Appraisal Tool for qualitative research, to synthesize qualitative evidence regarding the experience of women with breast cancer

in their role as daughters; however, this study also had certain limitations. First, due to language constraints, we only included studies published in English and Chinese, which may have resulted in loss of articles written in other languages. Second, only two included articles were rated A, while the rest were rated B, as most literature did not include information regarding the cultural background and values of researchers, resulting in potential bias. Moreover, only four of the 18 included papers specifically examined the experience of women with breast cancer in their roles as daughters, while the remainder had low relevance. Thus, our findings may not adequately summarize the experience of women with breast cancer in their role as daughters. These limitations highlight the need for more diverse primary research in different settings on the experiences of patients with breast cancer in their role as daughters.

Clinical implications

This study summarizes the positive experiences, negative experiences, and support needs of women with breast cancer in their role as daughters. The findings of this study have important implications for health care professionals in implementing psychosocial interventions for women with breast cancer and their parents. More qualitative studies on the experiences of patients with breast cancer in their roles as children are warranted in the future, to empower patients and their parents to cope with cancer and provide a basis for targeted family-based psychological interventions by health care providers.

Conclusions

The experiences of women with breast cancer in their role as daughters included positive experiences, negative experiences, and support needs. Health care professionals should be cognizant of the negative experiences encountered by daughters with breast cancer and offer tailored support promptly, based on individual circumstances, to facilitate the conversion of negative into positive experiences. Further, it is imperative to establish a comprehensive support system that fosters collaboration among families, society, and health care facilities. This will ensure that both patients with breast cancer and their caregivers receive diverse forms of assistance, facilitate the stable development of their relationships, and bolster the resilience of patients and their families in coping with the disease.

Ethics statement

Not required.

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CRediT authorship contribution statement

Mengjiao Xu: Conceptualization, Methodology, Data Curation, Formal analysis, Writing – original draft. **Linping Zhang:** Data Curation, Supervision. **Mi Zhao:** Resources, Supervision. **Suting Zhang:** Resources, Supervision. **Ting Luo:** Resources, Supervision. **Ying Zhu:** Resources, Supervision. **Jing Han:** Conceptualization, Funding Acquisition, Resources, Supervision, Writing – review & editing. All authors were granted complete access to all the data in the study, with the corresponding author bearing the final responsibility for the decision to submit for publication. The corresponding author affirms that all listed authors fulfill the authorship criteria and that no others meeting the criteria have been omitted.

Declaration of competing interest

The authors declare no conflict of interest.

Data availability statement

Data availability is not applicable to this article as no new data were created or analyzed in this study.

Declaration of generative AI and AI-assisted technologies in the writing process

No AI tools/services were used during the preparation of this work.

Appendix A. Supplementary data

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