

Symptom Experience and Management Needs of Breast Cancer Patients Undergoing Endocrine Therapy: A Qualitative Study

Siyi Qin¹, Yi Wei², Hongliang Li², Changyong Li²

¹Department of Breast Surgery, The Second Affiliated Hospital of Qiqihar Medical University, Qiqihar, Heilongjiang, People's Republic of China;

²Department of General Surgery, Dandong Central Hospital, Dandong, Liaoning, People's Republic of China

Correspondence: Changyong Li, Dandong Central Hospital, No. 70, Renmin Street, Zhenxing District, Dandong, Liaoning, People's Republic of China, Email zhenanlichangyong@163.com

Background: Endocrine therapy is essential for breast cancer management but often causes long-term side effects that impair quality of life. Understanding patients' lived experiences and unmet needs is critical for optimizing supportive care.

Objective: To explore the symptom experiences, coping strategies, management challenges, and support needs of breast cancer patients undergoing endocrine therapy.

Methods: A descriptive qualitative design was conducted in this study from December 2024 to May 2025. A purposeful sampling with the maximum variation strategy was adopted to select patients undergoing endocrine therapy for breast cancer. Semi-structured interviews were conducted to explore their symptom experiences, self-management practices and support needs. The data were analyzed using NVivo 12.0 through Braun and Clark's thematic analysis, and rigor was ensured through triangulation, participant validation, and audit trails.

Results: A total of 20 female breast cancer patients receiving ≥ 6 months of endocrine therapy participated in this study. These data reveal four main themes and 13 sub-themes. Four themes emerged: (1) Substantial multidimensional disease burden, revealing synergistic physical symptoms and psychological distress driving social withdrawal; (2) Individual variations in symptom coping styles, categorizing strategies as adaptive (proactive lifestyle adjustments), defensive (avoidance), or creative (self-devised techniques); (3) Diverse symptom management dilemmas, including knowledge gaps, limited self-advocacy, inadequate social support, and diminished motivation; and (4) Personalized symptom management needs, emphasizing demands for tailored information, lifestyle guidance, psychological support, and digital health tools.

Conclusion: Patients endure significant multidimensional symptoms exacerbated by heterogeneous coping capabilities and systemic barriers. Findings underscore an urgent need for patient-centered interventions addressing education, psychological care, and digital solutions to optimize long-term endocrine therapy management.

Keywords: breast cancer, endocrine therapy, symptom management, patient experience, qualitative research

Introduction

Breast cancer is the most common and fatal malignant tumor among women worldwide, surpassing lung cancer to become the top cancer globally.^{1,2} The treatment and care of breast cancer patients have brought serious economic and emotional burdens to families and society.^{3,4} The increasing treatment costs have added economic toxicity, while the costs of treatment and long-term care have placed huge demands on medical resources.⁵ Therefore, how to reduce the occurrence and development of breast cancer to alleviate the burden of disease on families and society has become a focus of researchers.

Approximately two-thirds of breast cancers are hormone receptor positive, and patients with hormone-dependent breast cancer are sensitive to endocrine therapy medications.⁶ Patients with hormone-dependent breast cancer typically begin 5–10 years of adjuvant hormone therapy.⁷ Endocrine therapy plays an irreplaceable role in delaying the progression

of the disease in hormone receptor-positive breast cancer patients, reducing the recurrence rate by 34–45% and the mortality rate by 29%–34%.^{8,9} Therefore, endocrine therapy significantly delays the development of disease in hormone receptor-dependent breast cancer patients, further improving their quality of life.

Although endocrine therapy has significant advantages in reducing breast cancer mortality and recurrence rates, in the real world, patients undergoing endocrine therapy for breast cancer often do not adhere to medication instructions completely due to various reasons, and some may even discontinue treatment early. Studies have shown that medication non-adherence rates among breast cancer patients undergoing endocrine therapy range from 13.4% to 73.0%,^{10–12} with 8% to 28% of patients not completing the treatment plan as recommended by specialists.^{6,13} Between 10% to 50% of breast cancer patients exhibit behaviors such as not taking medication at the correct dosage, frequency, or self-discontinuation of medication.^{14,15} 32% of patients undergoing endocrine therapy stop treatment early, with significant interruptions in treatment occurring in the first 1–2 years of medication use, followed by further interruptions in the 3rd year.¹⁶ Medication interruption is the main manifestation of poor medication adherence among breast cancer patients receiving endocrine therapy in clinical practice, primarily influenced by cognitive and psychosocial factors such as medication knowledge, motivation, self-efficacy, anxiety, depression, and social support.^{17–20}

While quantitative research provides valuable insights into the incidence and severity of symptoms associated with endocrine therapy, these methods are significantly limited in capturing the holistic patient experience. For instance, standardized indicators fail to reveal the true significance of joint pain for breast cancer patients undergoing endocrine therapy, namely how it alters patients' daily activities, erodes their emotional health, or challenges their sense of self-identity. Furthermore, these approaches often overlook the profound influence of contextual factors, personal meaning, and individual differences (such as cultural background, values, and life stage) on symptom perception and impact.²¹ Crucially, existing research offers insufficient nuanced understanding of patients' unmet management needs. Quantitative methods are difficult to deeply explore the core issues, namely what kind of support patients themselves think they need and what coping strategies they have tried.²² The inherent rigidity of standardized scales makes it impossible for them to capture unique, complex or dynamically changing personal experiences. Therefore, qualitative methodology is not merely a complementary approach, but is essential to address these critical gaps. Qualitative research has unique advantages. It can deeply explore patients' symptom experiences, reveal the special significance of symptoms to patients, analyze the implementation background of symptom management strategies, and truly present their unmet needs. Ultimately, it provides indispensable in-depth basis for formulating truly patient-centered nursing interventions.

Therefore, we aimed to explore the symptom experience and management needs of breast cancer patients during endocrine therapy through qualitative interviews to complement the limitations of current research and identify tailored intervention targets.

Methods

Study Design

A descriptive qualitative study was conducted in this study. See [Figure 1](#) for details. Participants were informed of the purpose of the study, the confidentiality of the data, and the voluntary nature of their participation, and all gave informed consent, including publication of anonymized responses and direct quotes. All procedures were performed in accordance with the 1964 Helsinki declaration. This research protocol was approved by the Ethics Review Committee of the Second Affiliated Hospital of Qiqihar Medical University (No.2024.0131).

Participants and Samples

Using purposive sampling with a maximum variation strategy, eligible breast cancer patients with endocrine therapy were selected from December 2024 to May 2025. Among 25 patients initially screened, 20 met all criteria and participated in the study. Inclusion criteria for participants: (1) Female; (2) Diagnosed with breast cancer; (3) Receive endocrine therapy for at least six months; (4) Age ≥ 18 years old; (5) Be able to communicate normally. Exclusion criteria: (1) Having a history of other malignant tumors; (2) Breast cancer recurred during the treatment period; (3) Those with other serious physical diseases such as heart failure and respiratory failure. The data saturation principle was adopted to determine the

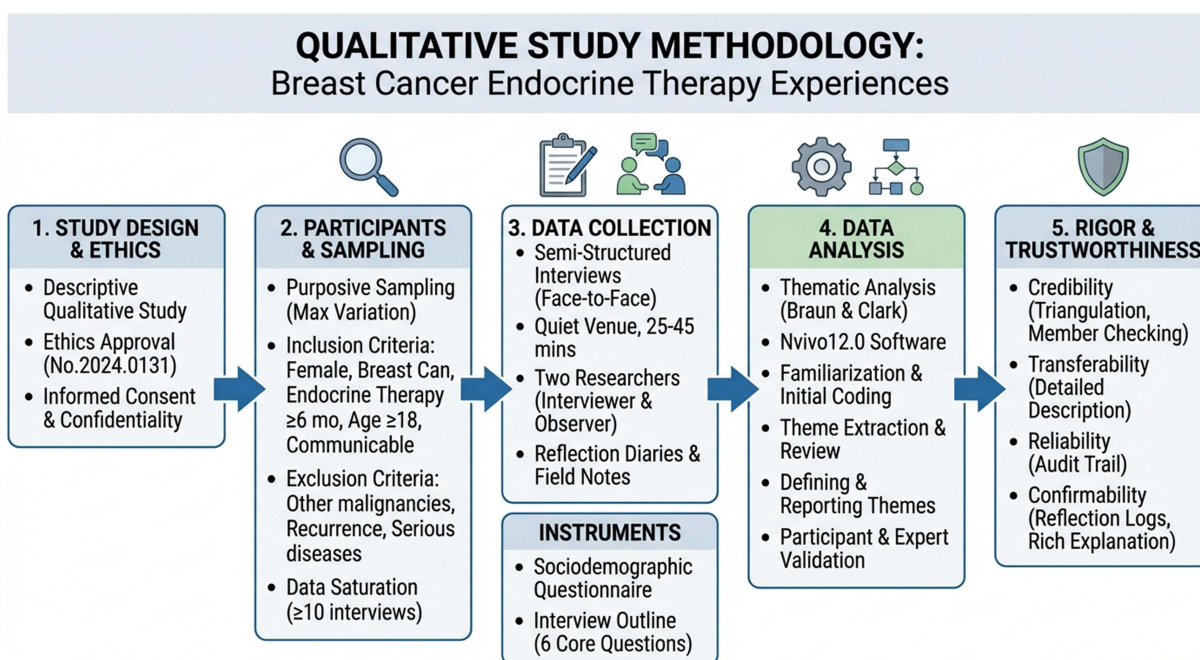


Figure 1 Flow Diagram of study methodology.

sample size in this study. That is, after at least 10 interviews, the interviews were stopped when no new information emerged in 3 consecutive interviews.²³

General Sociodemographic Questionnaire

After literature review and group discussion, a general sociodemographic questionnaire was developed, mainly covering age, educational level, marital status, parity, duration of endocrine therapy, and self-perceived physical condition (good, medium, poor) (Appendix 1).

Semi-Structured Interview Outline

Based on research purposes and group discussions, a semi-structured interview outline was developed. This tool mainly includes six core questions: (1) How long have you been receiving endocrine therapy? Which specific medicine was used? (2) Since you started endocrine therapy, what has been the biggest change you have felt physically, emotionally or in your daily life? (3) What positive or negative impacts have these changes or symptoms brought to you? (4) When you encounter these situations, what do you usually do by yourself to alleviate or deal with them? (5) Considering that endocrine therapy usually takes many years to complete, what are your thoughts or concerns about managing these symptoms in the long term? (6) Are there any aspects that we have not discussed but which you think are very important for understanding your experiences and needs?

Research Team

In qualitative research, researchers are regarded as one of the most important research tools. This research team consists of one professor in the field of qualitative research (responsible for quality control and code determination) and two master students who have mastered the knowledge and skills of qualitative research (responsible for qualitative interviews and code identification).

Data Collection

The researchers, as clinical health care providers, established good relationships with the respondents. Two researchers conducted face-to-face interviews with the participants. Choose a quiet and comfortable interview venue in accordance

with the participants' preferences. After explaining the purpose and significance of this study and signing the informed consent form, a formal interview was conducted. One researcher conducted interviews with the participants with a neutral attitude, while the other researcher was responsible for observing the non-verbal behaviors of the participants. The interview duration ranges from 25 to 45 minutes. After the interviews, the two researchers wrote reflection diaries to improve the interaction process during the interviews and record the most vivid and emotional thoughts.

Data Analysis

Based on the Braun and Clark thematic analysis method, the text data was analyzed using Nvivo12.0 software. The two researchers were respectively familiar with the text data to identify meaningful sentences and generate a series of initial encodings. The researchers evaluated the initial codes respectively and extracted new themes. Researchers examine potential themes to confirm the relationship between the code and the themes. The meanings represented by the above themes were further clarified and defined. Finally, these themes were reported logically. None of the participants participated in the analysis program of the qualitative texts throughout the process, but the themes were checked by the participants to ensure that their experiences were captured. In addition, three professors with rich qualitative experience were invited to review these codes and themes to enhance the scientific nature of data analysis.

Rigor

Rigor was evaluated based on the four criteria of credibility, transferability, reliability and confirmability.²⁴ The credibility of the results was ensured through a robust triangulation data analysis method (researcher analysis, participant examination, expert validation). A detailed description of the research background, participant characteristics and research environment enables readers to assess the applicability of the research results to other contexts, thereby supporting transferability. An audit trail was established throughout the research process, documenting the research design, data collection procedures and analysis steps, thereby enhancing reliability through transparency and consistency. Researchers also maintained reflection logs throughout the research process to monitor the impact of individual professional backgrounds and previous assumptions, minimize potential biases, and enhance the rigor of the analysis. Rich explanations further validate the theme, which supports confirmability.

Results

General Sociodemographic Characteristics

A total of 20 eligible female patients with breast cancer undergoing endocrine therapy participated in this study. Their ages range from 36 to 72 years old, with an average age of 56.25 ± 12.31 years. 30% of the participants had a primary school education. 65.0% of the participants were married. They have one to four children. The duration of endocrine therapy ranges from 6 to 41 months. 45.0% of the participants self-reported a moderate physical condition. See [Table 1](#) for details.

Study Themes

Thirteen subthemes emerged from the data and were categorized into four overarching themes: (1) Substantial multidimensional disease burden, (2) Individual variations in symptom coping styles, (3) Diverse symptom management dilemmas, and (4) Personalized symptom management needs. See [Figure 2](#) for details.

Substantial Multidimensional Disease Burden

Endocrine therapy imposed complex burdens extending beyond physical distress to encompass psychological pressures that profoundly disrupted physical functioning and social engagement.

Coexisting Physical Symptoms Triggering Functional Decline

Participants reported concurrent physical symptoms with synergistic effects that exacerbated functional impairment. The most prevalent symptom cluster included arthralgia, debilitating fatigue, and hot flashes/night sweats. These overlapping symptoms significantly compromised activities of daily living, housework capacity, and occupational performance.

Table 1 General Sociodemographic Characteristics of the Participants

No.	Age	Education	Marital Status	Parity	Duration of Endocrine Therapy (month)	Perceived Physical Condition
P1	47	Senior high school	Married	1	11	Medium
P2	42	Junior high school	Married	2	16	Poor
P3	36	Bachelor	Married	1	7	Poor
P4	65	Primary school	Divorced	1	38	Good
P5	47	Junior high school	Married	2	17	Medium
P6	53	Primary school	Widowed	2	9	Medium
P7	72	Primary school	Widowed	3	51	Medium
P8	71	Junior college	Married	4	32	Poor
P9	56	Bachelor	Married	1	19	Good
P10	37	Master	Married	2	13	Good
P11	53	Junior college	Divorced	2	21	Medium
P12	72	Primary school	Married	3	25	Poor
P13	54	Junior college	Married	1	19	Medium
P14	54	Senior high school	Married	1	9	Poor
P15	71	Primary school	Widowed	3	41	Medium
P16	69	Bachelor	Divorced	2	14	Good
P17	37	Senior high school	Married	1	6	Medium
P18	61	Junior high school	Married	1	12	Poor
P19	66	Primary school	Widowed	2	18	Medium
P20	62	Master	Married	4	37	Good

- P1:** My joints feel rusted, especially in the morning. I can not straighten my fingers and my knees buckle. Walking 1000 steps exhausts me completely.
- P3:** Bone pain stabs like needles. Standing after sitting is agonizing, and my joints crack when walking. The crushing fatigue penetrates my bones; sleep does not refresh me.
- P7:** Hot flashes drench my clothes day and night, with palpitations. Sleep deprivation leaves me listless and too weak to bathe myself.

Psychological Burden Driving Social Withdrawal

Body image alterations, fear of recurrence, and perceived loss of bodily control contributed to psychological distress. To avoid unwanted attention, embarrassment, and social exertion, participants actively withdrew from interpersonal interactions - manifesting as both physical isolation and emotional disengagement.

- P2:** Weight gain and hair thinning made me avoid friends. I feared pity and being a burden. I declined invitations and stayed home.
- P5:** Pain fuels my depression. I isolate myself because others can not understand my suffering, and I fear emotional outbursts.
- P9:** I dread public hot flashes. Even home visits feel taxing. Gradually, I disconnected from society and stopped reaching out.

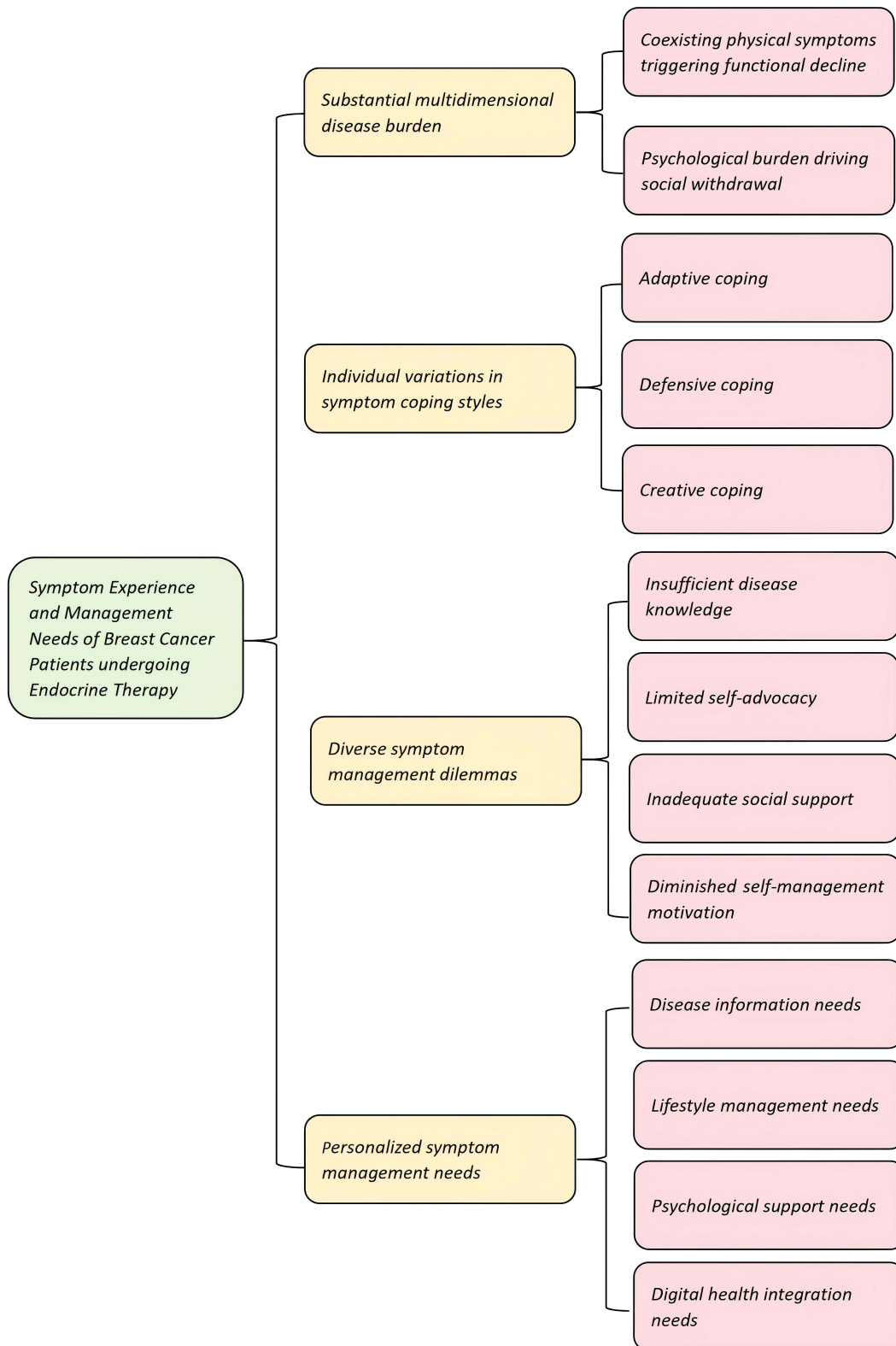


Figure 2 Symptom Experience and management needs of breast cancer patients undergoing endocrine therapy.

Individual Variations in Symptom Coping Styles

Patients demonstrated heterogeneous coping strategies that critically influenced quality of life and treatment adherence.

Adaptive Coping

Some adopted proactive approaches, including seeking credible information, communicating with clinicians, implementing tailored lifestyle plans (structured routines, modified exercise, dietary adjustments), and integrating treatment into daily life. These strategies enhanced disease control and well-being.

- P4:** Research and doctor consultations reassured me about expected side effects. Daily tai chi eases my joint pain, and I have optimized my diet.
- P6:** I carry cooling tools and avoid triggers like spicy foods. Breathing exercises mitigate hot flash distress.
- P11:** Peer support groups taught me swimming alleviates joint symptoms and improves sleep.

Defensive Coping

Others exhibited avoidance or passivity, covering minimizing symptom severity (enduring without help), over-relying on medications or caregivers, and demonstrating low self-efficacy. These patterns exacerbated symptom burden and compromised outcomes.

- P8:** I endure pain silently. Complaining seems weak - doctors can not perform miracles, and peers just tolerate it.
- P12:** Fatigue immobilizes me. My spouse handles everything. I know exercise helps, but motivation eludes me.
- P14:** Sleep requires pills. I avoid appointments - facing test results terrifies me.

Creative Coping

A minority developed innovative solutions, covering self-devised non-pharmacological techniques, hobby-based distraction, and adaptive goal-setting within physical constraints.

- P10:** I adapted hand exercises from stroke rehab - modeling clay entertains my grandson while improving dexterity.
- P13:** Lavender oil massages, music, and strategic pillow placement make pain bearable enough for sleep.
- P15:** I transformed calcium/vitamin D routines into joyful balcony reading sessions with sunlight exposure.

Diverse Symptom Management Dilemmas

Patients faced multilevel barriers spanning personal, social, and healthcare systems.

Insufficient Disease Knowledge

Participants reported critical gaps in understanding treatment mechanisms, long-term risks (eg, osteoporosis, cardiovascular effects), early warning signs, and evidence-based management - heightening anxiety and ineffective coping.

- P1:** I do not know why this medicine causes joint pain, nor have I learned what to do other than enduring it.
- P7:** I am confused about calcium dosing and safe sun exposure - the instructions I received were unclear.
- P11:** I had no idea bone density monitoring was essential until it was almost too late.

Limited Self-Advocacy

Many hesitated to voice concerns or negotiate care plans due to perceived clinician time constraints, self-doubt, and hierarchical barriers.

- P3:** I withheld symptoms during rushed appointments to avoid burdening the doctor.
- P9:** I feared appearing incompetent when exercises caused pain, so I discontinued them silently.
- P14:** I did not request sleep aid alternatives despite morning grogginess - trusting the doctor's choice.

Inadequate Social Support

Participants experienced insufficient practical/emotional support from families, employers, and policies - including symptom invalidation, occupational marginalization, and financial strain from uncovered therapies.

- P2:** My husband dismissed my symptoms as menopausal, and this invalidation hurt more than physical pain.

P5: My employer accommodated me by removing meaningful work, reducing my income and professional identity.

P8: Insurance covers targeted therapies but neglects essential side-effect management for endocrine treatment.

Diminished Self-Management Motivation

Symptom persistence, negative affect, past failures, and uncertain outcomes created demotivating cycles that undermined health behaviors.

P4: Severe hot flashes and knee pain ended my exercise routine. Restarting feels impossible now.

P12: Failed dietary attempts led to resignation - I now eat indiscriminately.

P15: Overwhelming life stressors sapped my motivation for self-care and follow-ups.

Personalized Symptom Management Needs

The burdens, predicaments and individualized coping styles experienced by patients reveal their urgent needs for all-round and multi-level support.

Disease Information Needs

Participants sought credible, individualized information on drug mechanisms, long-term risk surveillance, symptom management, and reliable resources - delivered via multimodal formats (visual aids, videos, apps).

P1: We need an official encyclopedia covering side-effect mechanisms, timelines, actionable strategies, and red flags.

P6: Hospital-hosted video sessions with Q&A would bridge information gaps unmet during brief visits.

P11: Personalized guidance accounting for comorbidities (eg, hypertension) is essential - generic advice is insufficient.

Lifestyle Management Needs

Requests included science-based dietary plans targeting specific symptoms (eg, hot flashes, bone loss), feasible exercise prescriptions, sleep optimization techniques, and ADL modifications.

P7: Nutritionists should provide illustrated meal plans addressing therapy-specific needs.

P10: We require home-based rehabilitation videos demonstrating safe, adapted exercises.

P13: Sleep specialists must teach non-pharmacological strategies for pain- and hot flash-disrupted sleep.

Psychological Support Needs

Participants desired interventions addressing anxiety, body image distress, cancer-related fatigue, and resilience-building - through counseling, peer groups, and digital mental health resources.

P2: Long-term counseling is needed to process recurrence fears in a safe space.

P5: Closed peer groups foster mutual understanding and body image acceptance.

P9: We need techniques to psychologically combat exhaustion when rest is ineffective.

Digital Health Integration Needs

Strong expectations existed for technology-enabled support: credible online communities, remote symptom tracking apps, streamlined e-consultations, curated educational content, and hybrid care models.

P3: An official app should analyze symptom trends and alert users when interventions are needed.

P8: Clinician-moderated platforms would filter unreliable peer information while enabling valuable exchange.

P14: Asynchronous e-consultations would efficiently address non-urgent concerns between visits.

Discussion

This study, through in-depth interviews, reveals the complex symptom experiences and management needs of breast cancer patients undergoing endocrine therapy. As a qualitative exploration focused on long-term treatment burdens, its core value lies in capturing subjective experiences, coping mechanisms, and multidimensional management dilemmas and needs that are difficult to access through quantitative research. The identified multidimensional burdens and systemic

challenges indicate that the current medication-centered service model inadequately addresses patients' intertwined physical, psychological, and social needs. This provides indispensable evidence for implementing precise symptom management strategies for these patients.

Patient-reported heavy multidimensional burdens reveal a synergistic amplification effect of endocrine therapy side effects. Physiological symptoms like arthralgia and hot flashes do not occur in isolation; instead, they form a vicious cycle with sleep deprivation and activity restriction, subsequently triggering psychological withdrawal.^{25,26} This mind-body mutual impairment mechanism stems from the therapy's sustained suppression of the estrogen pathway, directly disrupting neuroendocrine regulation and bone metabolic homeostasis.^{27,28} Notably, social avoidance behaviors, while superficially a coping strategy, actually manifest disease-related shame and diminished self-efficacy, potentially accelerating social functional decline.²⁹ Clinically, it is recommended to establish integrated assessment tools for mind-body symptoms and incorporate social function rehabilitation into nursing goals. Introducing cognitive-behavioral interventions early in treatment may disrupt the negative "symptom-withdrawal" cycle.

The significant divergence in coping strategies reflects fundamental differences in patients' ability to mobilize resources. Patients employing adaptive coping rebuild life order through information acquisition and behavioral adjustments, which represents the successful integration of the disease role.³⁰ Conversely, patients resorting to defensive coping often fall into passive endurance due to insufficient health literacy or weak social support, potentially increasing the risk of treatment discontinuation.³¹ Most illuminating is the group employing creative coping, who transform limitations into opportunities for life reconstruction through self-efficacy; this resilience may stem from prior successful coping experiences.³² Healthcare providers must avoid simplistically equating "treatment adherence" solely with medication-taking behavior and should identify the driving factors behind different coping patterns. The defensive group requires intensified symptom management guidance, while the experiences of creative copers can be disseminated through peer education.

The multi-layered nature of management dilemmas exposes structural deficiencies within the healthcare system. Patient knowledge gaps arise not only from insufficient information provision but also from a misalignment between professional terminology used in clinician-patient communication and patients' cognitive frameworks.³³ The phenomenon of weak self-advocacy confirms patients' passive role positioning under the traditional medical authority paradigm, while the social support gap reveals societal biases towards individualizing disease management responsibility.^{34,35} Particularly noteworthy is the non-linear relationship between impaired self-motivation and physiological symptom severity; some patients maintain management motivation even under high symptom burden, suggesting psychological resilience may be a key moderating variable.³⁶ Addressing these dilemmas requires a dual-track approach: developing patient-friendly decision aids at the system level, establishing clinician communication skills training mechanisms at the institutional level, and simultaneously advocating for workplace flexibility policies and health insurance formulary updates.

The four-dimensional needs identified by patients constitute the core framework for a symptom management support system. Information needs highlight the necessity of balancing content authority with accessibility, exposing the fragmented nature of existing health education.³⁷ Lifestyle management needs point to an application gap for precision medicine in non-pharmacological interventions, particularly the lack of treatment-phase specificity in exercise and nutrition plans. The prominent value of peer support within psychological support needs suggests that shared lived experiences may alleviate existential anxiety more effectively than professional intervention alone.³⁸ The demand for internet-based care underscores the necessity of integrating digital health services; current telehealth often focuses narrowly on diagnosis and treatment, neglecting symptom monitoring and community support functions. To translate these needs into practice, we propose integrating a tiered support system into routine oncology follow-up care. This system should include a standardized digital platform for symptom tracking and patient education, structured clinical reviews of patient-reported data to enable personalized guidance, and a formally facilitated peer-support program such as a Patient Ambassador initiative to bridge professional care with lived experience.

This study has several methodological limitations. The sample was drawn solely from a single regional medical center, potentially influenced by local treatment culture. Despite employing maximum variation sampling, the underrepresentation of rural low-income populations means their specific challenges may not be fully captured. Interview time constraints may have limited the depth of experience exploration, particularly as defensively coping patients might not

have fully disclosed their true difficulties. While the researchers' clinical background facilitated trust-building, it may have inadvertently steered patients towards focusing on medically intervenable issues. Future research should incorporate multi-center samples, employ mixed methods to quantify burden levels, and explore family member perspectives to obtain a more comprehensive picture. Finally, this study did not differentiate participants based on specific endocrine therapy agents or surgical approaches. While this aligns with our aim of exploring shared experiences, we recognize that symptom perceptions may vary across these subgroups. Future studies with stratified sampling are needed to investigate these potential differences.

Conclusion

The survival experience of patients with breast cancer undergoing endocrine therapy presents a multi-dimensional and interwoven challenge map. The regression of physiological functions and psychosocial withdrawal reinforce each other, forming a unique long-term therapeutic burden. The significant differentiation of patients' coping strategies requires a transformation of medical services from a standardized to a personalized paradigm. The management predicament focuses on the knowledge transfer mechanism, the doctor-patient interaction model and the social support system. To address systemic gaps in knowledge transfer, clinician-patient communication, and social support, healthcare providers should integrate routine psychological screening into follow-up visits, implementing digital tools for ongoing symptom tracking, and delivering structured patient education programs tailored to different treatment phases.

Open Science Transparency Statements

(1) study registration

This is a qualitative study where the study registration may be not a compulsory option.

(2) analytic plan registration

This is a qualitative study where the analytic plan registration may be not a compulsory option.

(3) availability of data

The original data used in this study can be requested from the first author for a reasonable reason.

(4) availability of analytic code

Not applicable.

(5) availability of materials.

The original materials used in this study can be requested from the first author for a reasonable reason.

Human Ethics and Consent to Participate Declarations

Participants were informed of the purpose of the study, the confidentiality of the data, and the voluntary nature of their participation, and all gave informed consent, including publication of anonymized responses and direct quotes. All procedures were performed in accordance with the 1964 Helsinki declaration. This research protocol was approved by the Ethics Review Committee of the Second Affiliated Hospital of Qiqihar Medical University (No.2024.0131).

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Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

The authors declare that they have no conflict of interest.

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