

ORIGINAL RESEARCH

Qualitative research on the perception of benefit in gynecological cancer patients

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ABSTRACT

Objective: To explore the experience of perceived disease benefit among gynecological cancer patients.

Methods: Using purposive sampling, twelve gynecological cancer patients were selected from a tertiary A-level hospital in Wenzhou city, from July to September 2023. Data were collected through face-to-face, semi-structured, in-depth interviews and analyzed using Colaizzi's seven-step method and NVivo 11 software.

Results: Five main themes were identified: perception of social support, growth and transformation in mindset, enhancement of health awareness and caregiving ability, gratitude and cherishing life, and improved family relationships.

Conclusions: Gynecological cancer patients are able to experience a sense of disease benefit during their treatment. Healthcare professionals should integrate knowledge of positive psychology and communication skills to guide patients in finding positive meanings and help them adopt more proactive coping methods to promote psychophysical health development, thereby improving the quality of life. In addition, it is encouraged that patients' spouses, family members, and friends provide the necessary social support, enhance the level of benefit finding, and establish a robust family and social support system.

Key Words: Gynecological cancer, Perception of disease benefit, Qualitative research, Phenomenological study

1. INTRODUCTION

Cancer has now become a major cause of death worldwide and a significant factor hindering the extension of human life expectancy.^[1] Among the ten most common cancers affecting women globally, two are gynecological, with cervical cancer now ranking seventh. Over the past 20 years, cervical, ovarian, and endometrial cancers, as the most common gynecological malignancies, have seen rising incidence and mortality rates in the world. They have become major issues affecting women's health and have drawn the atten-

tion of medical professionals.^[2] Surgery combined with radiotherapy and chemotherapy is the current main treatment approach for gynecological cancers, and the long-term treatment brings significant economic burden as well as physical and psychological discomfort to patients. With the development of positive psychology, the focus has shifted from merely highlighting the negative impacts of diseases such as cancer. Many researchers have started to explore the positive effects of positive psychology on patients. Positive psychology is a science concerned with positive subjective experi-

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ences, positive individual traits, and positive institutions.^[3] Researchers have found that individuals can experience positive personal, social, psychological, and spiritual experiences from negative life events such as diseases or traumas. This positive experience is known as the perception of disease benefit.^[4] The perception of disease benefit, also known as benefit finding, is often fostered by major traumas and negative events. It can promote recovery from illness by affecting endocrine and immune functions, healthy behaviors, and the perception of social support.^[5] This mitigates the negative emotional experiences associated with disease suffering, enabling individuals to acquire a new positive sense of self-worth and meaning, and fostering positive changes in individuals.^[6] It has also been shown that the ability to find positives or benefits in adversity can potentially benefit physical or mental health outcomes by reducing physiological stress responses.^[7] Cancer is often defined as a chronic extreme stressor, and cancer patients often experience recurring illnesses, meaning that the individual will be challenged to manage adversity, so having the ability to discover positive or beneficial aspects of the disease is important for cancer patients, and needs to be brought to the attention of healthcare professionals in terms of the perception of disease benefit.

This study aims to delve into the authentic experiences of patients' benefit finding after falling ill. Quantitative research methods struggle to explore the experiential feel in multiple, in-depth layers. Additionally, in China, scholarly research on the perception of disease benefit has been largely concentrated on patients with lung cancer and stroke, with less focus on patients with gynecological cancers. Therefore, this study decided to employ the phenomenological method within qualitative research, using face-to-face, semi-structured in-depth interviews to investigate the experiences of disease benefit among gynecological cancer patients. This exploration aims to provide guidance and reference for the clinical nursing work of gynecological cancer patients.

2. SUBJECTS AND METHODS

2.1 Research subjects

The study employed purposive sampling to select patients with gynecological cancer who were treated in the gynecological ward of a tertiary A-level hospital in Wenzhou city, Zhejiang province, from July to September 2023. Inclusion criteria included: (i) pathologically diagnosed with primary gynecological cancer, aware of their condition; (ii) aged ≥ 18 years; (iii) conscious with normal communication abilities; (iv) voluntary participation in this study. Exclusion criteria were: (i) individuals with psychiatric illnesses, history of mental disorders, or cognitive impairments that preclude normal communication; (ii) those who have experienced significant stressful events affecting their emotions

within the past three months; (iii) non-cooperation with the researchers. The sample size was determined by the no new themes emerged in the interviews. Ultimately, 12 patients were interviewed, with an average age of (53.92 ± 5.16) years. Before the interview, the purpose and method of the study were explained to the patients, and after obtaining their consent, informed consent was signed. The interviews were recorded in their entirety to protect patient privacy. The patients were assigned pseudonyms from A1 to A12 for anonymity. The basic information of the patients is presented in Table 1. This study was approved by the hospital's ethics committee (2023-K-108-01).

2.2 Research method

2.2.1 Data collection methods

The research team was composed of one chief nurse with over 20 years of experience in obstetrics and gynecology and the qualifications of a national second-level psychological counselor, and four graduate student members who were the main executors of the research. All researchers had received training in qualitative research. The study employed face-to-face, semi-structured in-depth interviews. Patients explored related themes by answering questions posed by the researchers. After extensive review of literature related to disease benefit perception, and discussions with gynecological experts and team members, a preliminary interview outline was drafted. Two patients were selected for pre-interviews. Based on the results, the team revised the outline again to form the final interview guide which included questions such as:

- 1) How did you discover your illness? What is your view on this disease?
- 2) How has the illness affected your life, work, and family? Can you specify any beneficial changes?
- 3) Have you encountered any difficulties during treatment? How did you solve them?
- 4) Has your mindset changed during treatment?
- 5) What gains or insights have you had during the treatment process?
- 6) What other knowledge about gynecological cancer do you wish to know?

Interviews were conducted in a quiet, bright, and undisturbed room, lasting 30-40 minutes, and were recorded.

2.2.2 Data analysis

Within 24 hours after each interview, two researchers transcribed the recordings into text, taking care to note non-verbal cues such as the patient's expressions, gestures, and eye contact. The Colaizzi's seven-step method^[8] and NVivo 11 software were used for a detailed sentence-by-sentence

analysis of the material. The specific steps were:

- a. Become familiar with the text content.
- b. Identify meaningful statements related to the theme.
- c. Encode repetitive perspectives.
- d. Collect these codes to find common concepts and form preliminary themes.
- e. Provide a detailed description of the themes, incorporating typical original statements from interviewees.

- f. Group similar themes and descriptions for comparison and differentiation, extract common viewpoints, and then construct a meaningful phrase or theme.
- g. Return the content to the interviewees to ensure the authenticity and accuracy of the data.

If the two researchers disagreed or had any disputes, the decision was made by group discussion.

Table 1. Socio-demographic characteristics of participants

Number	Age (years old)	Educational background	Diagnosis	Treatment mode	Payment method of medical expenses
A1	56	Primary school	Ovarian cancer stage III	Surgery + chemotherapy	medical insurance for urban residents
A2	62	Senior high school	Tubal cancer stage IV	Surgery + chemotherapy	medical insurance for urban residents
A3	47	Primary school	Tubal cancer stage II	Surgery + chemotherapy	medical insurance for urban residents
A4	50	Primary school	Endometrial stage III	Surgery + chemotherapy	medical insurance for urban residents
A5	53	Junior high school	Cervical cancer stage I	Surgery	self-paying
A6	52	Primary school	Endometrial cancer stage I	Surgery	medical insurance for urban residents
A7	51	Senior high school	Cervical cancer stage II	Surgery	medical insurance for urban residents
A8	62	Primary school	Endometrial cancer stage I	Surgery	medical insurance for urban residents
A9	52	Primary school	Cervical cancer Stage I	Surgery + chemotherapy	medical insurance for urban residents
A10	59	Senior high school	Endometrial cancer stage II	Surgery	medical insurance for urban residents
A11	47	Primary school	Cervical cancer stage I	Surgery	medical insurance for urban residents
A12	56	Primary school	Cervical cancer stage I	Surgery	medical insurance for urban residents

3. THE RESULTS

3.1 Theme One: Perception of social support

The interviewees shared the importance of the help and support they received from family members, friends, fellow patients, and professional medical staff. The family provides an essential layer of emotional and practical support that directly influences the patient’s morale and optimism. Similarly, the professional demeanor and empathetic care from the medical staff are pivotal in providing patients with the knowledge and reassurance needed to face their medical challenges with confidence.

3.1.1 Support from fellow patients and friends

Most patients mentioned that during the treatment process, they received concern and practical advice from friends and

fellow patients, which are critical for the psychological well-being of patients battling illness.

A1: “After falling ill, I made a lot of friends. We added each other on WeChat and greet each other regularly. We chat about what we’ve eaten, whether we’ve gone for a check-up, and we ask about each other’s health conditions and check-up results. If we come across relevant videos on TikTok, we share them with each other.”

A2: “I made quite a few friends in the hospital too. I often encourage others. We exchanged WeChat contacts and frequently chat there, discussing things related to diet, like what is good to eat for one’s health. We boost each other’s morale, and give encouragement.”

3.1.2 Family support

The positive and optimistic attitude within the family and support from relatives significantly relieve the patient's stress, enhance their confidence and treatment compliance, reduce the fear of cancer recurrence, and help them recover health.

A2: "My husband also often comforts me, telling me not to be stressed and that there is nothing to fear. He says that mood is very important. He is very caring about me and said he would stop working, because he's afraid there would be no one to take care of me."

A5: "My daughter-in-law often brings me tasty things, like fruits and snacks, letting me know that I have a strong support system at home, So I've also come to have a more positive outlook."

A11: "My family members call me every day to ask if I've eaten well or slept well. All those caring words give me a lot of strength."

3.1.3 Support from medical staff

During the treatment, the medical staff fight alongside the patients, timely providing encouragement and knowledge about the disease. This support can bring a sufficient sense of security to the patients and increase their confidence to undergo subsequent treatments.

A8: "The doctor is very good to me. Before surgery, the doctor would come to the ward to care for me, which made me very happy. I also recovered very well, which made the doctor happy, and me as well."

A9: "The doctors and nurses here have a very nice attitude, they are very patient in explaining things to me, like my condition."

3.2 Theme Two: Growth and transformation in mindset

When asked about changes in mindset, many interviewees expressed that they were trying to adjust themselves, calmly accepting the reality of their illness, facing it optimistically with active treatment, and ultimately a positive, hopeful outlook.

3.2.1 Resilience and not giving up

The battle against disease is long and painful, but patients have shown a strong attitude.

A4: "Initially, I thought about giving up chemotherapy, but then I thought that I shouldn't give up. When I was as young as you girls, whatever I did, I had to succeed."

3.2.2 Acceptance

Facing cancer, patients actively adjust their mentality and accept their condition with composure.

A7: "Since the disease has occurred, I can't do anything about it, and escape is not an option."

A4: "I always have to face this thing, in any case, I still have

to overcome it."

3.2.3 Optimism

Maintaining an optimistic outlook can be powerful medicine in itself.

A5: "[Laughs] I'm foolish; I don't know all that much, so I stay optimistic. What's the use of being nervous? Being nervous, life goes on as it does, doesn't it? I don't want to dwell on it."

A8: "Now, my mindset is getting better and better. I try to make big issues small, and small issues nothing at all. That's how I think."

3.3 Theme Three: Enhanced health awareness and caregiving ability

Despite most interviewees stating that their cancer experience has dealt a significant blow to their life and mindset, the treatment journey has increased their focus on their own or their family and friends' health. They have also consciously or unconsciously learned related caregiving knowledge. The experience of dealing with a serious illness like cancer often results in increased health literacy, more proactive health behaviors, and an appreciation for the value of preventive measures, all of which contribute to better overall management of their health and potential future risks.

3.3.1 Emphasis on medical checkups

Many patients mentioned that a major change brought about by the disease treatment process is paying more attention to physical health and realizing the importance of medical checkups.

A7: "Just like my friend, after this happened to me, she realized that she should also get a medical checkup. We never had this concept before."

A12: "Now I cherish my body more and know to get check-ups, something I never wanted to hear about before. I used to avoid doctors. My daughter was talking about HPV recently, saying that we have to get checked every year and get vaccinated on schedule."

3.3.2 Focus on diet

Patients pay more attention to their diet and nutritional supplementation after getting sick.

A2: "Firstly, it's about health preservation. What can be eaten and what can't, nourishing the body properly, I've become more concerned about this kind of knowledge."

3.3.3 Importance of exercise

During the treatment process, some patients said they would pay more attention to physical exercise to increase their resistance and reduce the possibility of disease recurrence.

A1: "I have bought a lot of sports equipment, quite a lot [laughs]."

3.3.4 *Attentiveness to disease knowledge*

Patients pay more attention to knowledge about their disease during treatment, seeking information through various means.

A3: "I pay more attention to health now. If I don't understand something, I search it on here [referring to smartphone] [laughs]. If there's anything else I don't understand, I'll also ask my children."

A10: "In addition to what doctors say, I also often look up information online. The internet is so developed now, I can learn a bit and understand a bit."

3.3.5 *Emphasis on health insurance*

Some patients expressed that disease insurance has relieved their financial stress and made them realize the importance of health insurance.

A1: "It's good that I had insurance. I've also bought insurance for my son, and I secretly bought it for my husband as well."

A10: "It was purchased by my children, saying that nowadays this disease is affecting younger and younger people. So they got me critical illness insurance after I turned 50."

3.3.6 *Improved self-care ability*

In the battle against the disease, patients have learned some self-care methods, enhancing their ability to take care of themselves.

A2: "I can take good care of myself now on my own. I told my husband to continue his job as a security guard; I can take care of myself."

3.4 *Theme Four: Gratitude and cherishing life*

Interviewees reported a direct change in their perspective and approach to life, with an increased focus on enjoyment, cherishing, and satisfaction. They began to appreciate family members, cherish kinship and the beauty of life, and recognize what is truly important to them.

3.4.1 *Grateful for family time*

Many patients realized the importance of family and became more appreciative of the time spent with loved ones.

A5: "In a person's life, which is only a matter of decades, I feel that I really cherish this fate, the kinship with my own family."

A11: "It's mainly the care and concern of my family that makes me feel warm. Life still needs to be cherished, cherish the present."

3.4.2 *Enjoying the beauty of life*

Through continuous self-regulation and reflection, patients began to understand what is truly important in life and started to enjoy its beauty.

A8: "My eyebrows are not good-looking at all. Previously, I

was always busy making money. Now I think, life shouldn't be like this. Anyway, if I dress up, I also look pretty, so I went to do (eyebrow embroidery)."

3.5 *Theme Five: Improved family relationships*

During the treatment process, patients and caregivers, including family members, learned to be considerate and understanding of each other, and to be more patient.

A9: "My daughter has been taking care of me, and in terms of communicating with her, I try to be more patient."

A10: "Before I got sick, my children didn't realize and would lose their temper. Now they are nicer to me, and my attitude has also changed a bit."

4. DISCUSSION

4.1 *Perceived benefits among gynecological cancer patients during treatment*

The concept of perceived benefits stems from positive psychology, focusing on the positive impact of negative events such as disease on patients.^[9] Research indicates that positive and negative emotions co-exist during stressful times, and positive emotions play a significant role in physiological, psychological, and social coping, particularly in response to cancer-related stress.^[10,11] Our study found that gynecological cancer patients' sense of perceived benefits is reflected in five themes: perceived social support, growth and transformation in mindset, enhanced health awareness and caregiving ability, gratitude and cherishing life, improved family relationships. These findings are largely consistent with those of Jia Lei et al.^[12] Patients actively transform their mindset during surgery or chemotherapy, striving to experience positive outcomes, learn about their disease, and promote health behavior change, thus aiding recovery and reducing the likelihood of relapse. Family and social support instill confidence in overcoming the disease and help adjust negative emotions timely, enabling a more positive and proactive attitude towards the challenges of illness. These experiences not only warm patients with family love and strength but also lead to a contemplation of the meaning and growth of life, thus enhancing their sense of happiness. Family relationships become more understanding and harmonious, fortifying the patient's strength to conquer their condition.

4.2 *Clinical implications of perceived benefits for gynecological cancer patients*

4.2.1 *Mobilizing intrinsic motivation*

Perceived benefits, seen as a way to enhance self and overall coping efficacy, are believed to mitigate cancer stress.^[13] Even in the initial postoperative recovery phase, these benefits aid in adaptive coping and alleviate physiological and

psychological distress.^[14,15] Studies have shown that perceived benefits are associated with greater use of positive coping strategies and seeking social support.^[16] Therefore, in clinical practice, it is crucial for medical staff to listen to patients, guide them using knowledge from positive psychology and communication skills to find their perceived benefits, helping them adopt a proactive coping style and extricate themselves from negative emotions associated with the disease. Many patients have expressed a desire to understand more about their prognosis and recurrence rates, indicating that medical staff should actively communicate, answer patient queries, and help patients grasp knowledge about their disease and prognosis, providing professional guidance and boosting their positivity and confidence. Comprehensive health education should be carried out around surgery and chemotherapy, using methods like flipped classroom models, mindfulness-based stress reduction, art therapy, and gratitude journals, all contributing to alleviating patient stress, aiding in facing realities, and improving psychosocial adaptation levels and a positive outlook for the future. This can significantly reduce cancer-related fatigue, shame, and anxiety levels.^[17-19]

4.2.2 Strengthening and developing external motivation

Healthcare professionals should also encourage the patient's family and friends to provide social support, reinforcing their confidence in overcoming difficulties and elevating their level of benefit finding, thus building a supportive family and social system. Involve caregivers in health education activities, such as simultaneous health education for family members,^[20] enhancing their sense of participation, lightening the psychological burden of both patients and families, aiding in the relief of anxiety and depression, and improving life quality. Gynecological cancers, often affecting the reproductive system, can impact spousal relationships, making spousal support especially critical. Healthcare professionals should treat the patient and spouse as a unit, implementing interventions from a positive dyadic coping perspective, facilitating communication and mutual support,^[21] improving dyadic communication quality and perceived spousal support, thereby enhancing family resilience and cohesion.^[22] Some patients have indicated that financial concerns due to treatment can be a significant source of stress, especially for those seeking treatment far from home with less familial or social support. Therefore, calls to action for government and related agencies to provide macro-level social welfare security, a shared database for medical institution information exchange, balance regional medical resources, and alleviate medical resource tension are essential. Social workers can assist in alleviating patients' financial pressures through welfare organizations, foundations, and online platforms.^[23]

5. CONCLUSION AND LIMITATIONS

This descriptive phenomenological study, through in-depth semi-structured face-to-face interviews, explored five themes of perceived benefits among gynecological cancer patients: perceived social support, growth and transformation in mindset, enhanced health awareness and caregiving ability, gratitude and cherishing life improved family relationships. These findings guide clinical nursing practices, highlighting the importance of positive psychology in healthcare and guiding patients to find positive meanings and coping strategies for better psychophysical health, thereby enhancing quality of life and happiness. However, the study participants were limited to patients from a tertiary hospital in Wenzhou City, Zhejiang province, which may not be representative. Since perceived benefits are dynamically evolving, future research could expand the sample size and design longitudinal studies to understand changes in perceived benefits among gynecological cancer patients over time and whether these benefits continually promote or affect changes in patient behavior and attitudes. This would provide a reference for constructing feasible intervention programs to enhance perceived benefits among gynecological cancer patients.

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AUTHORS CONTRIBUTIONS

MS. Huang Zhaoxia, Miss. Li Xinyan and Miss. Wen Yi were responsible for study design and revising. Miss. Li Xinyan and Miss. Wen Yi was responsible for data collection. Miss. Shuwan and Mr. Shen Zhefan performed the analysis. Miss. Li Xinyan drafted the manuscript and MS. Huang Zhaoxia revised it. All authors read and approved the final manuscript.

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DATA SHARING STATEMENT

No additional data are available.

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